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The Journal
OF
The Society of Architects.

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THE

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OF

The Society of Architects

FOUNDED 1884; INCORPORATED 1893.

INCLUDING

Transactions and Architectural Notes.

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The Society is not, as a body, responsible for the opinions expressed by individual authors and speakers.

A Ministry of Fine Arts.

The idea of establishing a Ministry of Fine Arts at Home is being seriously discussed says *Indian Engineering*, and appears to receive strong support from the leading members of the various artistic professions, such as painters, sculptors and architects; and it is probable a provisional committee will shortly be formed to go into details and formulate a practicable scheme. The French model will naturally be taken as a guide, but British feeling is against making the scope of the scheme at first so wide. At any rate as there is some feeling at Home against the control of the drama by the State this function of the French Minister of Fine Arts will at first be omitted, and perhaps also his control of art manufactures. There actually is at present a good deal of State control over matters connected with the arts through the Board of Works and other administrative bodies, but it is felt that a central controlling body would be more effective by having all finances devoted to art expenditure in its own hands and seeing that it was devoted in a reasonable proportion to different objects. The technical staff, again, by being attached to one department, would work with more co-operation seeing that there is a good deal of interdependence between the various arts, and a single department could always see that the work of one branch did not clash with that of another.

Our contemporary comparing the attitude of the Gaul and the Briton in relation to appreciation of art further suggests that the Gaul loves money too, but the fact that he has less of it than the Briton, though it does not prove at least raises a presumption that he does not seek it with equal ardour; that, in fact, he divides his time better and keeps an appreciable part of it for the gratification of the more ideal side of his nature. We see the result in the more general prevalence of Art in France, in the fact that France produces more and better pictures, more and better statues, not more perhaps but better public buildings. It is because Art is more loved in France that it is fostered more, since it may possibly be that its fostering produces its development. Anyway, the pioneers of the movement for the creation of a Ministry for the Fine Arts in England must base their hopes on the latter proposition when they essay to rescue British Art from its slough by providing for it so powerful a foster parent as a Minister of the Crown.

In France, under the Ministry of Fine Arts, there is an Under-Secretary who directs all the strictly artistic operations of the country, such as archæological investigations, reports on the organization of museums in other countries, reports on the art side of National Exhibitions, reports on the organization of theatres, reports on fine arts of other kinds, as for instance Japanese art, and kindred matters. This central organization is maintained at a cost of some hundreds of thousands of pounds annually. Nor does the country make a bad investment by all this expenditure. It has served to create flourishing industries in France itself, given the French people a name as good designers in all the decorative arts, and so established business for them abroad, and it attracts the wealthy people of the whole world to see its Art treasures. A form of Art, however, that has lately caught on with extraordinary violence in England is town-planning which though something more than engineering cannot be said to belong to the domain of high art. Perhaps scientific town-planning is the first awakening of the artistic spirit and will lead in time to a more generous recognition of the other forms of Art.

The Athenæum commenting on the School of Architecture at Cambridge says, the scheme seems to us admirable, and we hope that it will be a success. It is in accord with the general movement to-day towards more beautiful and suitable buildings, and will do something, we hope, to raise the standards of taste in this country. We are not likely to get the Minister of Fine Arts who is being widely demanded just now, but we are entitled to expect more knowledge and keenness in the average University man than he shows at present.

Registration News.

The R.I.B.A. Bill.

The President of the Manchester S.A., Mr. James Brooks, F.R.I.B.A., states that as a member of the R.I.B.A. Committee he can speak of the strenuous efforts which have been made to prepare a Bill which would be in the best interests of the profession and be accepted by Parliament. A draft Bill has now been completed, in spite of little encouragement from counsel and others who have been consulted as to its chances of becoming law. They are advised that in the present condition of Parliamentary affairs a Bill of this nature is not at all likely to be successful. In the face of these difficulties many of the Council feel that they had better rely on their powers under the existing Royal Charter, which powers are, Mr. Brooks states, recognized by the Law Courts, and, it is thought, are sufficient for that purpose. He does not see that the profession would really gain much by an Act of Parliament. The object of acquiring an Act is primarily for the prevention of unqualified men practising as architects ; but, on the other hand, an Act of Parliament would mean giving authority and position to many unqualified men who have at present no recognition as qualified architects.

The medical profession have an Act of Parliament for their protection against unqualified practitioners, but they are by no means free from quacks and patent-medicine vendors, who continue to flourish. The R.I.B.A., says Mr. Brooks, is probably the best means for our government, and its By-laws and regulations will sufficiently uphold the best interests of the profession.

It is evident from Mr. Brooks' official statement that the Council of the R.I.B.A. is still divided on questions of principle as well as in regard to the scope of Registration. In regard to the latter, we hold that Registration, whether under Charter or Act of Parliament, is for the profession and not merely for any one section of it. The R.I.B.A. have a much more difficult task than the S.A. in this matter. The former are set the problem of reconciling the wishes of the general body of members, with the opinions of a Council, whose policy is liable to alter with every change of personnel. The S.A. on the other hand are pledged as a body to one main definite principle and line of action which is not affected by changes on the Council or deterred by difficulties.

So far as we know, the report of the R.I.B.A. Registration Committee, which has been dealing with the matter for nearly two years, has not been published, but coming events cast their shadows before, and Mr. Brooks, as a member of that Committee, presumably speaks with knowledge and authority.

Proceedings.

A Special General Meeting of The Society of Architects was held at 28, Bedford Square, London, W.C., on Thursday, October 16th, 1913, at 8 p.m.

The President, Mr. Percy B. Tubbs, F.R.I.B.A., having taken the Chair, it was resolved that the Minutes of the last Ordinary Meeting held on June 5th, 1913, as printed in that *Journal* be confirmed and signed.

Election of Officers and Council, 1913-14.

The Chairman read the Report of the Scrutineers of the Ballot for the election of Officers and Council for the ensuing Session, which was as follows :—

To the President and Council of The Society of Architects.

Gentlemen,—We beg to report that we have received, and examined 193 Voting Papers for the Election of Officers and Council for the Session 1913-14. Of these, seven were rejected on account of absence of signature on the envelope, two because they were posted too late, and one as being signed on the Ballot Paper, a total of ten found invalid. The results of the voting on the 183 valid papers were as follows :—

PRESIDENT : Percy B. Tubbs, F.R.I.B.A. (183). VICE-PRESIDENTS : R. Goulburn Lovell, A.R.I.B.A. (183) ; E. C. P. Monson, F.R.I.B.A. (182). PAST PRESIDENTS : G. E. Bond, J.P. (183) ; E. J. Hamilton (183). HON. SECRETARY : Col. F. S. Leslie, R.E. (183). HON. TREASURER : Chas. E. Jackson (183). HON. LIBRARIAN : Prof. Henry Adams, M.INST.C.E. (183). MEMBERS OF COUNCIL : E. J. Sadgrove, F.R.I.B.A. (175) ; G. A. Harrison (174) ; E. J. Partridge, F.S.I. (169) ; R. Cecil Davies (168) ; R. A. Jack (168) ; Herbert W. Matthews (168) ; George H. Paine (165) ; J. Herbert Pearson (161) ; Noel D. Sheffield (159) ; C. E. Dickens-Lewis (158) ; William H. May (158) ; A. J. Taylor (155) ; P. M. Beaumont, A.M.I.C.E. (154) ; B. R. Tucker, M.R.SAN.INST. (154) ; Henry A. Cooper (153) ; A. Allan H. Scott, M.R.SAN.INST. (153) ; Harry Gill (148) ; J. A. Bowden (146) ; T. Wallis (146) ; C. E. Salmon (143).

It will be noted that Mr. Bowden and Mr. Wallis received an equal number of votes ; and it remains therefore, under the Articles of Association, No. 49, Section 7, for the members present at the Special General Meeting to " decide by giving the casting vote or votes necessary to remove the equality and complete the election."

HERBERT FREYBERG
T. STEWART INGLIS
SIDNEY MARSLAND
E. W. HARVEY PIPER
} *Scrutineers.*

October 15*th*, 1913.

The names of the Candidates affected were then submitted to the Meeting, and on a vote being taken, Mr. Thos. Wallis was declared elected.

The Scrutineers' Report was then adopted, and a hearty vote of thanks was passed to them for their services.

The President expressed his appreciation of the continued confidence placed in him by the Members, and his desire to place his best services at the Society's disposal.

Four Nominations for Membership were announced.

Mr. Christopher A. Markham, F.S.A., then read a paper on "Church Plate," illustrating his remarks by means of a collection of photographs and a number of original drawings.

MR. S. W. KERSHAW, M.A., Hon. M.S.A., in proposing a vote of thanks to the lecturer, said they were much indebted to him for the interesting and instructive way in which he had dealt with the subject. There was one aspect of the case emphasized by the examples shown by Mr. Markham, which he thought should receive attention, viz., the necessity for ensuring the sale custody of Church Plate in the hands of its rightful owners and for preventing its being disposed of in any improper manner.

MR. HERBERT FREYBERG, F.S.I. (Member), in seconding the vote of thanks expressed the view that there was considerable scope for the architect as treasure hunter as well as designer in this matter. He could not help thinking that in the days of the spoiler, churchwardens and others must have made some effort to preserve such treasures, which might be brought to light again in the course of restorations or even by excavation for other purposes.

MR. B. R. TUCKER (Member) supported the vote of thanks. He had read Mr. Markham's pamphlet on the "Church Plate of Northamptonshire," with great interest, and the present paper would be a most valuable record and one which would be much appreciated by the readers of the *Journal* in which it was to be published.

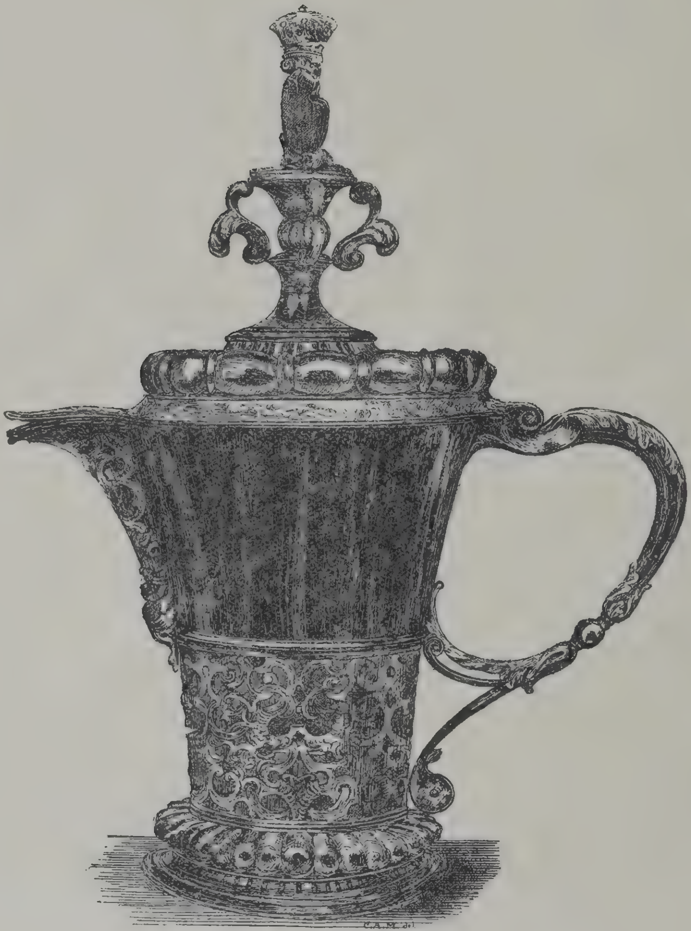
MR. A. H. SALISBURY (Member) sought for more information on points of detail connected with the nomenclature and design of the chalices, cups and patens described and illustrated by the lecturer. It was a subject in which he was greatly interested.

MR. F. DENDY WRAY severely criticized the design of some of the Church Plate, which he thought was deplorable. Many of the cups now in use by or in the keeping of the Church were merely copied from the old pot-house wine cup and was absolutely unsuitable for Church purposes, so far as design and beauty was concerned. Much of the plate which had any artistic quality had been taken from domestic use in some rich man's house.

MR. MARKHAM, in reply, dealt with the points raised and expressed the pleasure which it gave him to have an opportunity of placing some of the results of his researches before the Society.

At the conclusion of the Meeting, a hearty vote of thanks was accorded to Mr. Markham, who after acknowledging it, replied to the points raised.

The proceedings then terminated.



Silver Gilt Flagon. Easton, Northamptonshire.
Date 1735.

Church Plate.

By Christopher A. Markham, F.S.A.

INASMUCH as architects who receive commissions to erect new churches, are sometimes asked to design the new cups, patens, and flagons for use in such churches, it cannot be said that the knowledge of the forms of such articles is superfluous for an ecclesiastical architect.

Vessels used for the administration of the Holy Communion naturally date back to the institution of that sacred rite by Our Lord; and no doubt such vessels were originally the common domestic utensils in every-day use in the Holy Land. But, as years went by, it is probable that the cup used as a chalice and the plate as a paten, were set apart, and reserved for such special use. Therefore, as might be expected, we have to wait many centuries after Christ, before there is any written record relating to the material or form of chalices or patens; nor are there any remains of such vessels of early date.

Mr. W. H. St. John Hope, says that :—

> " There appears to have been no special form of Chalice during the first ten centuries of the Christian era. A common type was a classical cup with one or two handles, or more, and a round bowl and foot. The cup without handles had usually a more or less developed knot between bowl and foot by which to hold it—the stem of later days being represented by bands at the junctions. When the cup was withdrawn from the laity in the Twelfth Century, the handles ceased to be of use, and were no longer made."

No doubt at one time Communion vessels were made of every conceivable material, but as the late Mr. Cripps says :—

> " In process of time objections were found to these; wood was porous, and liable to absorb a portion of the sacred element placed within; horn was an animal substance and so formed by blood; glass, crystal and precious stones were all brittle and liable to fracture; and at length the precious metals alone were allowed to be employed."

The first distinct reference to Communion vessels was made at the Council held at Rheims, in 847, when it was decreed that chalices should be made wholly of silver, unless gold should be available, tin was allowed in cases of great poverty, but no other material might be employed.

The next reference was in 1206, when Stephen Langton again prescribed the use of silver for chalices.

In the twelfth century it appears, from inventories and bequests in wills, that chalices were of a certain well-known form, but of which it is not easy to gather particulars now. It is, however, certain that, in the Cathedrals at any rate, the chalices were magnificent, being of pure gold, with many precious stones.

Coming to the thirteenth century, we reach a period when the form of the chalice and paten first becomes certainly known, and from this time we can follow the change in the fashion of these Holy vessels. We can trace the shape of the chalice, from its first plain outline, to its complicated and very beautiful form at the end of the fifteenth and beginning of the sixteenth centuries. We must then follow the drastic changes made by the Reformation, and later on by the Puritan spirit, and so on to the present time, when there is no style in such matters, but only an imitation of either the Pre or Post Reformation forms.

Indeed, we can note all this in exactly the same way in which we follow the development of the styles of architecture. Its massive piers, heavy round arches and plain windows of the thirteenth century. Its taller and slighter piers, pointed arches, and grouped lancet windows of the fourteenth century. Its more elegant forms, elaborate mouldings, and lovely window tracery of the fifteenth century. Its perpendicular lines, panelled walls, ornate roofs and four-centred arches of the sixteenth century. Its revival of the Classic forms in the Renaissance architecture of the sixteenth and seventeenth centuries. Its debased forms and church-wardens windows of the eighteenth century. Its iron erections of the present day.

The number of Pre-Reformation chalices and patens still remaining in England is now pretty accurately known, and they have been carefully classified by Messrs. W. H. St. John Hope and T. M. Fallow. These writers enumerate some 38 chalices and 84 patens, with which they were acquainted. Further research through the various sets of Communion plate in the country, which are being catalogued, may bring to light other mediæval vessels, but it is not probable that any new types will be discovered.

In this paper it is proposed to follow the classification akopted by these writers, which cannot be improved.

Taking first the chalice as the more important of the two vessels, we ought first to consider the three parts of a mediæval chalice :—

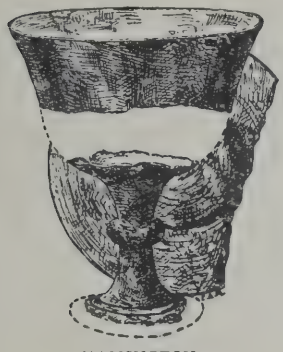
First, there is a small bowl for the wine.

Secondly, a stem to connect the bowl and foot, with a knot in the centre, by which the vessel was held.

Thirdly, the foot on which it stood.

Each of these parts changed its shape as time went by, the plain simple form developing into the beautiful and elaborate chalices used immediately before the Reformation.

And first, I should like to say a word about coffin chalices ; the oldest chalices now in existence are those which were found in the graves of ecclesiastics. The treatment of this subject would form a paper by itself, and therefore, can here be but lightly touched on. It appears that during the twelfth and subsequent centuries, it was the general custom to bury with an ecclesiastic, as a symbol of his calling, a small chalice and paten. For bishops and the higher dignitaries of the church, these vessels were made of silver, while for the parish priest, tin or pewter was used. All these coffin chalices are of the very earliest shape, with round feet. I may describe one set which was found in Northamptonshire, in a grave in the North Aisle of Nassington Church. In this grave, with the skeleton of a man, there were three escallops or palmer's shells, each pierced with two holes for hanging on the dress; these shells being the privileged sign used by persons returning from the Holy Land, and also a little chalice and paten which are of pewter; the chalice has a shallow bell-shaped bowl with slight lip, the stem is slender and cylindrical, with knot in the centre, and the foot, which has been much damaged, is circular: the paten has a single circular depression, with rather broad edge. These are of the earliest type, and may be assigned to the middle of the thirteenth century.


NASSINGTON.

Returning to Mr. St. John Hopes' classification of chalices, we find that there are four types with round feet known as A, B, C, and D; and the same number with polygonal feet known as E, F, G, and H; and these I propose to mention in their proper order.

Taking first Type A, which was in use *circa* 1200 to *circa* 1250, and of which there are only three principal examples remaining. Of these the most important is the chalice, which was until quite recently in the Church at Berwick St. James, Wilts, and is now in the British Museum. This is of the early part of the thirteenth century. It is parcel gilt, and quite small, its height being only 5⅞ inches, and the width of bowl and foot 4⅞ inches. The bowl is broad and shallow, with slight lip, as in all early chalices, a cylindrical stem with circular knot in the centre and broad spreading circular foot, the whole being perfectly plain.

Type B, *circa* 1250 to *circa* 1275, has a broad and shallow bowl; the stem and knot being worked separately from the bowl and foot, and either the stem or the knot or both being polygonal; the foot being plain and circular. Examples of this type occur at York, Lincoln, and Exeter.

Type C, *circa* 1275 to *circa* 1300, still has a broad and shallow bowl; the stem and knot being as in the previous type; and the foot being still circular, but with its spread worked into ornate lobes which radiate from the stem, over the surface of the foot. Chalices of this type exist at York, Salisbury, and Chichester.

Type D, *circa* 1300 to *circa* 1350. Chalices of this type have a deeper and more conical bowl than those of earlier date, but the other parts are as before described. There appears to be only one specimen of this type, which was found in the supposed grave of William of Melton, at York, who was Archbishop from 1316 to 1340. On the foot of this chalice is engraved a crucifix, which is the earliest example of such an addition.

This brings us to the middle of the fourteenth century, and the drastic change from the round foot, to that of polygonal shape. The change was no doubt introduced because at this period a custom obtained in Western Europe of laying the chalice on the paten to drain, after the celebration of the High Mass. Now a chalice of the round-footed type, would be very liable to roll when laid on its side, and therefore, the foot was made with points, so as to prevent such tendency. The hexagon was at the same time chosen, because its points are further apart than any other practicable shape. Another result of this custom of emptying the chalice was, that the bowl was made conical in shape, so as to allow of its being more easily drained when laid on its side.

After these few words of explanation, we must return to our classification.

Type E, *circa* 1350 to *circa* 1450, is the earliest with a polygonal foot. The bowl is deep and conical, as in the previous type, the stem and knot are uncertain in shape, the foot, however, is always of six points or lobes. The earliest chalice of this type is at Hamstall Ridware, in Staffordshire, the date of which is about 1350. The bowl of this is deep and conical; the stem and knot are circular, the latter being formed of sections twisted spirally; the foot is formed of six points, with a beaded pattern running round the lower edge.

Another example at Goathland, in Yorkshire, is about a hundred years later than that previously mentioned; it has an hexagonal stem with plain knot, having the same number of sides, and on one compartment of the hexagonal foot is engraved the I H C.

Type F, *circa* 1450 to *circa* 1510. The chalices of this period have the bowl deeper, more conical, and usually quite plain, though sometimes with a text round the edge. The stem has six sides, it is longer than in previous examples, and is sometimes covered with tracery having buttresses at the angles. The knot is more ornate, and usually beautifully worked, with angels' heads, flowers, or other designs, and indeed, it reminds one of a boss on the ceiling of a building in the Decorated style. The foot is usually plain and flater than before, and the points are sometimes worked into trefoil knops, and a crucifix is usually found in one of the compartments. There are at least a dozen chalices of this type still remaining.

Type G, *circa* 1510 to *circa* 1525. The chalices of this date have further developed, but hardly for the better. The bowl is somewhat shallower and more square at the base; the stem and knot are as before; the foot however is quite different, as the points have become large lobes, thus making it sexfoil in plan, with a vertical edge. There are three of these chalices, the earliest and best being Bishop Foxe's gold chalice at Corpus Christi College, Oxford.

Type H, *circa* 1525 to *circa* 1540. This is the last distinct variety before the Reformation, and four examples still remain, which are more architectural in character than anything we have previously noticed. The bowl is broad and shallow being more like the earlier hemispherical forms, and it generally has a legend or text round the edge. The stem is more ornate, and strengthened at the angles by buttresses on cable moulding. The knot is wider and flater than in the preceding type. There is a kind of pierced parapet which connects the stem with the upper part of the foot, and this in its turn has a sort of buttress at each angle. The lower part of the foot is quite flat, and may be described as a wavy-sided hexagon, and there is generally a crucifix in one of the panels, and also a legend round the foot.

So much for the Pre-Reformation chalices, and now for the patens, which appear to be somewhat older, and of which a greater number remain, over eighty examples being known.

Patens again are divided by Mr. St. John Hope into two main classes. First, those which have a circular depression, with an inner depression multifoil in outline, and which form the greater number. Secondly, those which have only one depression which may be either circular or multifoil. Almost every paten has some design in the centre, those of the earlier date generally have the *Mansus Dei*, or Hand of God in the Act of Blessing, while those of the later date have the *Vernicle*, or Face of our Lord.. Sometimes, however, the Holy Trinity, the Holy Lamb, the Sacred Monogram, or other symbol is found. These patens are divided into seven types as follows :—

Type A, *circa* 1180 to *circa* 1260. These patens have a circular depression, with an inner depressed quatrefoil, of which several examples remain ; one has the *Manus Dei*, another the Holy Lamb, and a third the figure of a bishop.

Type B, *circa* 1260 to *circa* 1300. The patens of this period have a lower or single depression octofoil or multiple ; and they generally bear the *Manus Dei*. The most remarkable example of this type is the paten still in use at Wyke Church, near Winchester, which is parcel gilt ; the first depression is circular, the second octofoil, and the third again circular, with the symbol of the Holy Lamb roughly incised. Its date is about 1280.

Type C, *circa* 1300 to *circa* 1350, and later, has the upper depression circular and the lower sexfoil, with the *Manus Dei*, or the I H C in the centre.

Type D, *circa* 1430 to *circa* 1530, comprises some half of the existing patens, and is similar to the last named, except that the spandrils of the second depression are ornamented with a kind of rayed leaf. The central ornament is various, but the *Vernicle* is usually employed.

Type E, *circa* 1450 to *circa* 1510. The patens of this type have a single circular depression, and usually the sacred initials I H C or I H S are engraved in the centre.

Type F, *circa* 1525 resembles type D, with varying central device which however is surrounded by a glory of rays, and there is usually a legend round the edge.

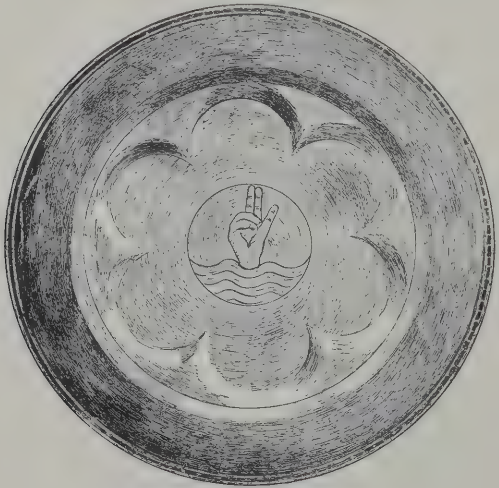
Type G, *circa* 1520 to *circa* 1535, is an elaboration of type E. The patens of this period have a single circular depression, with a device surrounded by a glory of long rays and the rim has an engraved legend.

No doubt in the cases of both chalices and patens, as in architecture, these types overlapped each other, and the dates given by Mr. St. John Hope are only approximate.

Having sketched the history of Communion plate before the Reformation, we must now pass on to say a few words about that very disturbing period of English history.

I would draw your attention to the grand display of plate which might have been seen in our abbeys, cathedrals, and parish churches in the Middle Ages. Even in the smaller churches there would always be two or more chalices, each with its paten, generally gilt or parcel gilt, and often enriched with precious stones. Always two or more candlesticks, crosses, chrysmatories, pyxes, and censers—the latter often in the form of ships. Flagons do not seem to have been used, but frequent mention is made of cruets.

In Pre-Reformation times, as now, church plate was almost always the gift of an individual, and occasionally one comes across a bequest in a mediæval will or some other record of such a gift. Thus, in 1246, King Henry III., gave a chalice for the Church of All Saints, and smaller vessels for the other parish churches in the town of Northampton. The Rev. Thos. Lufwyck, Rector of Burton Noveray, Co. Leicester, in 1390, by his will gave to Lufwyck, or Lowick Church in Northamptonshire his "best silver zone to make a chalice." Edward Brudenell, of Deene, in Northamptonshire, by his will dated June 21st, 1425, bequeathed to St. John's Hospital, Aynho, in the same County, his missal and a chalice. William Holt, of East Carlton, Northamptonshire, bequeathed by his will dated August 24th, 1497, "To the house of the Abbey of Land all my plate there to remayne and abyde for ever. . . I restore to the chappell of Holtt a chalys of selver."



Silver Gilt Paten.
Welford, Northamptonshire,
Date *circa* 1330.

I do not propose to treat the period of the Reformation at any length, as this paper only professes to deal with the fashion and design of Communion plate.

Suffice it to say that after the year 1534, the work of spoliation commenced, and has ever since been going on merrily. First came Henry VIII., who in 1539-40, suppressed all religious houses throughout the realm, and, of course, appropriated their possessions; at the same time he appears to have taken many of the silver vessels from the parish churches, instructing his Commissioners to leave only sufficient for the use of the church.

As showing the completeness of the sweep made at the time of the Reformation, I may mention that in the 330 parish churches in Northamptonshire, there is but a single piece of mediæval plate. This is a little silver gilt paten five inches in diameter, with the centre sunk in a circle and sunk again in hexafoil, with plain spandrels, and the *Manus Dei* in a circle in the centre; and it is of the approximate date of 1330.

When incumbents and church wardens found how the matter was going they also began to dispose of their church plate. Between the years 1547 and 1552, great numbers of churches were represented as having been broken into and the plate stolen. No doubt, in many cases, this was a pretence, to account for the disappearance of the silver which had been thus alienated.

In 1552, when King Edward gave orders to make an inventory of the church goods and seize certain for his use, the Commissioners were still instructed to leave "one, two, or more chalices or cuppes according to the multitute of the people."

The inventories then made are still extant for many parts of the country, and a number of these have been printed in the various County Histories of Church Plate.

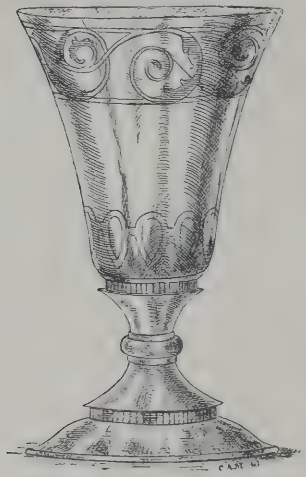
At this time the King also ordered that "all monuments of feigned miracles, pilgrimages, idolatry and superstition," were to be destroyed; and all chalices coming under this clause were melted up and fashioned into cups.

It is supposed that, about the year 1562, some general Order was issued in London as to the shape of these cups; for almost all the cups in England made between 1562 and 1570, or a little later, are practically identical in their outline, though they all vary in minor points. No such Order has been found, but unless some such regulation was passed, it is impossible to account for extraordinary similarity between the cups of this period, whether found in Gloucestershire or Cheshire, in Suffolk or Monmouth. It appears that this is a similar matter to the vexed question of Low Side Windows. It seems to me that a general Order was also issued during the reign of Henry VIII., directing that all such windows should be walled up; and that under this Order Low Side Windows from one end of England to the other were closed by brick or stone work. But, here again, no such Order has been found.

I should like to mention, in passing, that at the present time it is quite improper to speak of a "chalice," the correct word being "cup." Indeed, the word used in the Book of Common Prayer is invariably "cup," except in one side note where the Priest is "to lay his hand upon every vessel (be it Chalice or Flagon) in which there is any Wine to be consecrated." This, I would suggest was to meet the case of a parish which was the possessor of a mediæval chalice.

It must be understood that in the following remarks I am dealing more with the Church Plate of Northamptonshire than any other County, but in any case this

County is quite a typical one, except with regard to Pre-Reformation plate of which it only possesses the solitary paten previously mentioned.



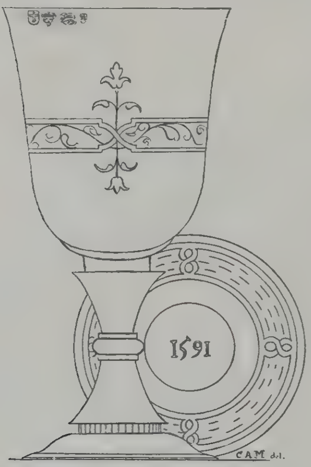
Silver Gilt Cup.
Great Houghton,
Northamptonshire,
Date 1553.

At Clapton, in Northamptonshire, there is a very fine silver gilt cup and cover paten, which as it is the earliest is also the most beautiful in the County. This was made in the second year of the reign of Edward VI., and is probably the second earliest Post-Reformation cup in England.

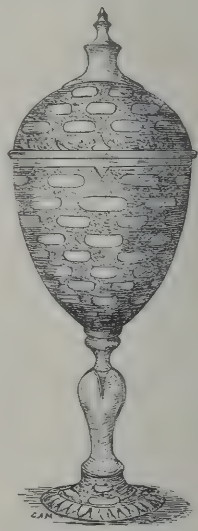
At Great Houghton there is another cup also made in the reign of Edward, though five years later than that at Clapton. This it will be noticed is more like the regular Elizabethan type which is found from one end of England to the other. The lines and ornamentation of this cup are very good.

There are two cups, somewhat like that last described, at Clipston and Kislingbury, which were made about the year 1562. They are of hammered metal, and were perhaps by a local silver smith, as they bear only the maker's mark.

Then come a splendid series of cups, each with its cover paten, made between the years 1568 and 1570, of which there are 126 in the County of Northampton. These are all much alike, but no two are identical, the form and ornamentation differing in each, and some of them have the stem without a knot.



Silver Cup and Paten,
Ashley, Northampton.
Date 1570.



Silver Gilt Cup
and Cover.
Furtho,
Northamptonshire.
Date 1601.

The next series are standing cups with covers, which were not intended to be used as patens, of which we have several good examples, and of which I have illustrations. The Corby cup, is entirely silver gilt and richly ornamented, and is of beautiful design and workmanship; the Furtho cup is also gilt, and is covered with a very curious ornament.

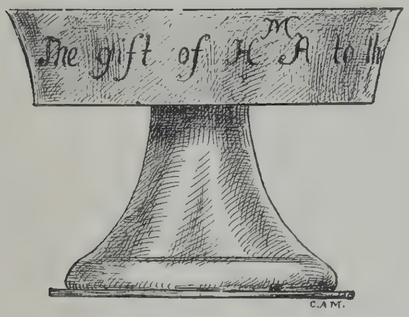
There are only two beakers in the County. That at Upton is probably of German manufacture; and, curiously enough, the other is at the adjoining parish of Sutton, and was probably made by a local workman on the pattern of that at Upton.

At Cottesbrook there is a cup, which was made in 1635, and is in the form of a Pre-Reformation chalice. This has a small conical bowl, a tall stem with knot in the centre both with six sides, and a spreading six-pointed foot. Altogether a very rare shape for that period.

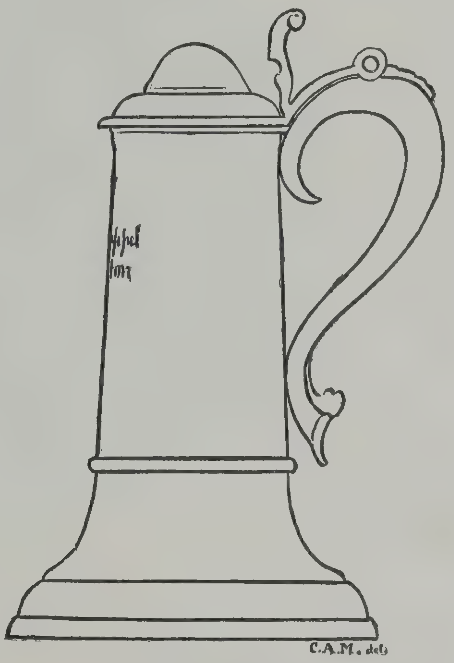
In the middle of the seventeenth century another type of cup was introduced of heavier design, with bowls of great capacity and clumsy form, thick stems and plain feet.

The vessels now at Loddington, which were made in 1671, were perhaps originally domestic, and afterwards given to the church, one is like a small porringer or caudle cup with two handles, and the other like a mazer.

The curious little vessel at Plumpton made in 1694, might serve either as cup or paten, but is now used as the latter, and is of quaint design.


The gift of H M A to th
C.A.M.

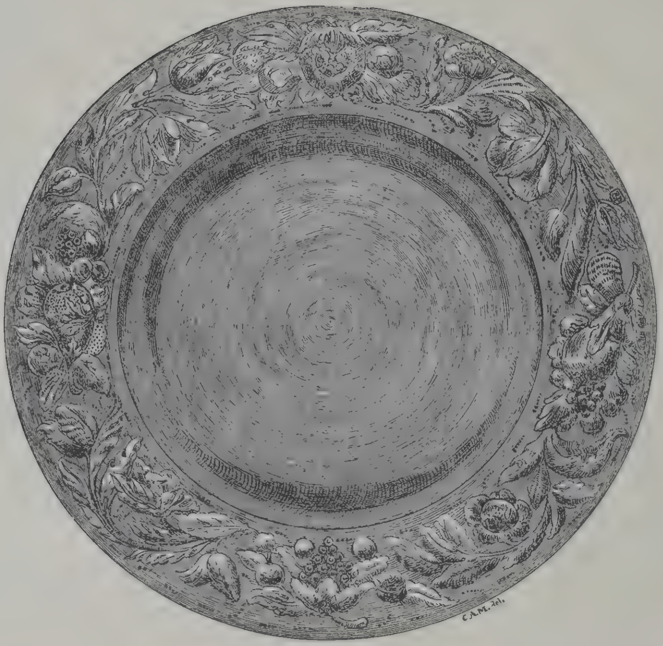
Silver Cup.
Plumpton, Northamptonshire.
Date 1694.



Silver Flagon.
Church Brampton, Northamptonshire.
Date 1760.

A few good pieces of Communion plate were made early in the eighteenth century by that celebrated artist, Paul de Lamerie; and after that time the forms of the patens, cups, and flagons degenerated very much, and nothing can be less artistic than the vessels made in the eighteenth and nineteenth centuries.

Flagons do not appear to be earlier than the beginning of the seventeenth century.



ALMS DISH
Peterborough Cathedral.
DATE *circa* 1650
Scale 1/6 Full size.

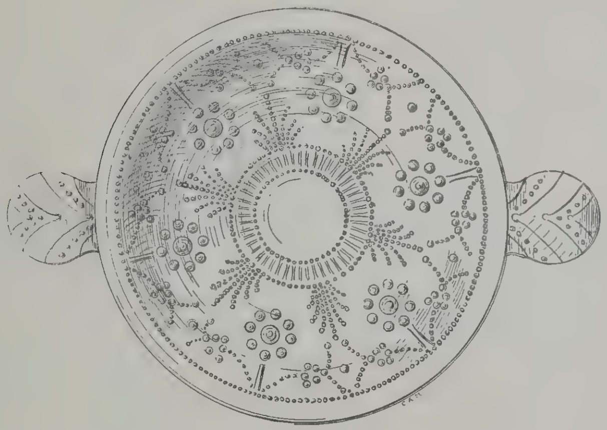
The first made in Northamptonshire, was Hall Marked in 1605, it is at Great Brington, and it is quite plain.

The very beautiful flagon at Easton Neston was made in 1735, it is entirely gilt, and is a good specimen of the work of Paul de Lamery.

Many of the flagons of this period are of great size, and those at Peterborough Cathedral weigh over one hundred ounces each.

Alms dishes are not in general of much interest, though sometimes they are of fine design. At Peterborough Cathedral there is a very beautiful alms dish, silver gilt, 19½ inches in diameter, which was made about 1650, and weighs 54 ounces. It is ornamented round the edge with fruit and flowers, representing peace and plenty, in repoussé work. At Finedon there is an alms dish 2 inches high and 14½ inches in diameter, which is composed of about 350 pieces of mother-of-pearl, which are curved and riveted together in a very beautiful and accurate manner. This is probably of foreign workmanship.

Of Christening bowls we find a few, at different villages. For instance, at Finedon there is a Christening bowl, which like the alms dish at the same place, is composed of mother-of-pearl, the sides being formed by fourteen curved sections, each of which is a shell ; the whole is riveted together so accurately that the bowl will hold water.



Silver Dish.
Flore, Northamptonshire.
Date 1669.

A number of small dishes will be noticed of which I have drawings of two, one of which is the charmingly ornamented little two-handled dish at Flore : these are generally used as bread holders.

In Northamptonshire there are some half dozen strainer spoons, the greater number of which are modern and unimportant, but that at Dallington is an Apostle spoon which was made at York in 1597.

I should say a few words about pewter vessels of which there is a great quantity all over England, much of which still continues in use. In Northamptonshire there are some sixty-six flagons of pewter, the earliest dated example is that at Werrington, which is inscribed 1609. Some of these flagons are large and handsome, some are quite plain, and some battered out of all knowledge.

At Warkton there is a curious old pewter paten, on a foot, with the remains of a cover.

There are several pewter Christening bowls, and also one pair of pewter candlesticks.

Several hundreds of plates still remain, of all sorts, sizes, and shapes, most of which have received considerable damage during their long years of service. Some of these have been used as patens, the upper surfaces having been much cut, while others have been used as alms dishes.

At Stanton Wyville Church, in Leicestershire, there is a complete and very handsome set of Communion plate, which was made in 1699. This consists of a good sized cup, a paten on foot, a tall flagon with lid, and a very large alms dish.

The illustrations are taken from *The Church Plate of the County of Northampton*, by the writer of this paper.

Professional Matters in South Africa.

THE NEW LAW COURTS, CAPE TOWN.

New Law Courts, to be erected in Cape Town, had been projected for many years, and in 1898 the Public Works Department got so far as to have complete working drawings prepared for a three story building, to be built on the present site. Want of funds prevented further action and there the matter rested until 1907, when competitive designs were invited from South Africa only. The successful competitors were Messrs. Hawke & McKinlay, who had been successful in the competition for the new University Buildings in Queen Victoria Street. Funds being available, drawings were at once prepared by the architects for putting in the foundations, and the work was entrusted to Messrs. A. B. Reid & Co.

During the progress of the work of excavation it was decided to provide a basement, consisting of storage rooms, and this being approved of, the trenches and area were sunk lower, resulting in water difficulties being encountered, while at the south east end of the site quicksands had to be dealt with ; but all difficulties were overcome.

The Public Works Department kept a constant watch on the work as it progressed, the architect of the Department then, Mr. A. G. Howard, M.S.A., had to pay periodical visits to ensure that Government's interests were being protected ; Mr. Skinner was engaged as Clerk of Works, which post he still holds. Upon the completion of this portion of the work, progress was stayed and everything was held in abeyance, the only expenditure being due to the necessity for pumping.

Some two years ago a contract was let to Mr. Benning for the erection of the superstructure, and the work is now nearing completion, with very satisfactory results.

GREATER CAPE TOWN'S NEW MAYOR.

The first meeting of the Amalgamated Council of Greater Cape Town took place on September 8th. The first act was the election of a Mayor, and the lot fell on Mr. John Parker, F.R.I.B.A. It is very gratifying to see the first Mayor of the new *regime* drawn from the ranks of the Architectural Profession, and South African Architects must feel proud of the distinction.

Whether Mr. Parker will make a satisfactory Mayor or not remains to be proven, but prognostics seem to point to the former conclusion ; at any rate the Council can congratulate itself upon having elected a thoroughly honest business man, one well acquainted with Cape Town and its Suburbs, and of all Municipal work. As an architect he has made his name in the Peninsula, (not to speak of areas beyond that) and he lives and will continue to live in buildings which shall declare his name long after he has ceased to exist.

The buildings are varied in style, some appealing to one man's taste and some to others, but like all architects he has moved along independently and impressed his own ideas on his work, without being swayed by outside advice. I am sure we all wish him every success in his new sphere of action.

A. G. Howard, M.S.A., Cape Town.

Transvaal News.

Since the great Johannesburg strike in July there has been some diminution in the volume of building, and many architects are finding their well matured schemes hung up. Nevertheless, there is still considerable activity and several large works are in progress, viz. :—the Institute of Medical Research, £33,000, the New Synagogue, £18,670, the Town Hall, £330,000, and the extension to Central Head Offices of South African Railways, about £25,000. About 70 new houses are being erected every month. The Town Hall is the most important building in Johannesburg, the stone work is nearly finished and the edifice promises to eclipse any of its sisters in other towns, and the public are evincing the greatest interest in the building. It should rank amongst the finest Town Hall Buildings in the world. In addition to the Municipal Offices there are the great hall to seat 3,000, a lesser hall (upstairs) to seat 950, and running parallel to the great hall is a line of fine reception halls of a total length of 130 feet, and very ample provision is made for crush halls, boggias, lobbies, lounges, lavatories, bars and cloak rooms, and in these respects the building will be, in the writer's experience and opinion, almost without a rival.

The building fraternity is finding continual trouble since the Union through the steady influx of Cape people (*i.e.*, coloured people of half-caste and mixed blood), these people are tolerably good builders, and good enough for cheaper work, and much employed as they accept less wages by half than the average European and are thus prejudicing the position of the European most seriously. At present this invasion is kept in check by the strong prejudice of the home-born European property owners who form the majority of our population, but in time the inevitable will happen as it has at the Cape, transfusion of the races will take place to a large extent and gradually more toleration will be extended and the field of the "pure white" correspondingly limited. There are even now one or two coloured "architects" who are capable draftsmen and can design well enough to suit the taste of the poorer districts.

Johannesburg is gradually becoming the emporium of lower Africa from the Congo Free State to the Cape. It is well situated, geographically, the climate is about the mildest and most equable in the world, and converging railways from all the ports and the remotest interior lead more or less directly to this centre. The result is the erection of warehouses on a much vaster scale than ever yet seen here.

In the last six months about twelve large wholesale warehouses have been constructed, and in addition some large manufacturing buildings have been erected. The reason is the great growth of distributing trade, the cheapest motive power in the world, and the presence of a large population which afford industries a good foundation to start with.

Pretoria building appears to be quietening with the completion of the great Union Buildings and other great public structures with which that city is now liberally adorned and endowed, but all over the Union the Government continuously carry out schools and other public buildings at an average value of something like a million or so a year. The latest projection is the Governor-General's residence at the Cape for which a competition has been held in the Union, and which has just closed but is not yet decided. The assessors are : Messrs. Herbert Baker, W. H. Stucke and P. Eagle (Government Architect).—E. H. WAUGH, M.S.A., Johannesburg.

King George visited Chichester recently, and formally re-opened the West Sussex Hospital, which he decreed shall henceforward bear the prefix " Royal." The Institution dates back to 1784, and became the Chichester Infirmary in 1826. It has been thoroughly renovated and reconstructed at a cost of £16,000. The front of the building has been cleaned and re-faced with cement, and the principal features of the extension are the provision of a new out-patients' department, two sanitary wings on the north of the building, and an operating theatre block. The sanitary blocks go up all the floors, containing on each level a complete sanitary equipment, entirely isolated by air-chambers. The operating theatre and its subsidiary rooms are admirably adapted for their purposes. Accident cases can be taken from the street into the theatre without a stair being climbed. There is a new X-ray department, with elaborate electrical equipment. There has been no increase in the actual accommodation for patients, but the whole building has been reconstructed internally; the staff accommodation has been greatly improved, the hospital re-drained, and a large laundry with modern machinery provided. Open-air balconies have been constructed, and the whole of the lower portion of the hospital has been provided with a concrete flooring. The works were designed and carried out under the supervision of MR. CHARLES W. BALL, of Southsea.

Colonial Dutch Architecture.

Mr. F. R. Kendall, F.R.I.B.A., in the course of a lecture before the National Society, at Rondesbosch, says, nearly all the old country homesteads are built in the shape of an " H," a very simple device, which lent itself well to the circumstances, as it allowed each room to be well lighted, and roofed in a single span. The house then consisted of two parallel blocks, one some 20 ft. or so behind the other, with a connecting link at right angles. This latter portion was used as a central hall extending from front to back, being lighted by door and windows at each end, giving on to the front and back stoeps. By this arrangement it was possible to get some additional windows in to the middle of the hall from the two little side courtyards, which were formed between the front and back blocks.

Another plan—more common in the Cape Peninsula—was that somewhat in the shape of the letter " U," but with square corners. Here again the hall extended along the centre from front to back, the two side wings running parallel with it, and adjoining it. In this case the problem of roofing the building was not quite so simple, as it was practically necessary to form a break in the regular system of single pitched roofs, and cover the back portion of the hall with a flat.

The ground plan of certain other houses is in the form of the letter " T "—but these are houses of less significant size.

The stoep became a necessary adjunct—often at the back as well as at the front of the house—and this was sometimes covered by a pergola supported upon columns or piers, so that it was possible to grow vines or other creepers over the stoep. This was a delightful natural arrangement for providing shade in the summer, and allowing the sun's rays to penetrate to the walls and through the windows in the winter, when its warmth was welcome.

The indigenous woods were commonly used for the constructional beams, such as ceiling joists, etc., and were only roughly wrought. For the more important joinery it was usual to employ teak, which was imported from the East Indies. Probably there were no carpenters among the settlers, so that ship's carpenters had to be secured when they were available. No doubt the doors, shutters, etc., are from their hands—whereas the rougher work might have been done by unskilled workmen.

The danger from fire owing to the thatched roofs was soon realized, as we find it common to have a layer of brandsolder above the ceiling of the ordinary rooms, to form a protection to the rooms of the house should the thatch take fire. The ample space enclosed by the high pitched roofs then became available for storage purposes, and this loft was approached by a step-ladder from the outside, leading to a door in one of the gables.

THE TOWN HOUSES.

Where houses stood close together the danger of fire spreading was naturally increased, and this was doubtless the reason why in town houses the flat stone roofs soon seem to have replaced the early thatched ones. The Cape Authorities, when communicating with "The Seventeen" at Middelburg in 1737, mentioned that "some of the houses were old, low, and in disrepair, and that people were encouraged to build them better, higher, and under flat roofs to prevent them being totally ruined by fire." The town houses thus partook of a different form—usually being two storeys in height as ground was more valuable—and often with an observatory raised above the level of the flat roof. This was doubtless for the purpose of sighting the arrival of ships from home or from the East, as they, of course, played a very important part in the life of the town.

The windows were often shuttered, and the shutters were usually solid and not louvred, having the centre filled with a good strong panel, often very attractively moulded. As the shutters were solid and fitted only to the bottom sash, it may be concluded that they were used only for protection from thieves or wild animals, and not for the sake of shade.

The many other little domestic touches which were so highly appreciated among the Dutch people of the time were much in evidence in these early houses—such as the delightful wrought iron work to the shutters in the form of catches, bolts, hinges, etc., or the brass handles, escutcheons, etc., etc., to the doors.

The idea of the screen which commonly divided the dining hall from the vestibule was a Batavian importation, and soon became a regular feature.

Furniture was sometimes imported—but was often made locally—elaborate pieces often having inlays of ebony or ivory from India.

No doubt from these brief remarks you will understand some of the ways in which the limitations of a new country dictated the lines which could best be followed in building houses. Necessity is the Mother of Invention, and the two together have produced some very pretty solutions to the problems of our daily life.

The mechanical work of the building was chiefly done by slaves—many of whom were imported from Madagascar; but it is regrettable that so little is known of the individuals who designed and supervised the handiwork of these old buildings. It is believed that a certain Locksmith was detained on his way to Batavia by Van der Stel to do the metalwork for Groot Constantia—much to the indignation of "The Seventeen" in Amsterdam.

Correspondence.

To the Editor of "The Journal of The Society of Architects."

Practice as to Opening Tenders.

Sir,—At the recent General Meeting of this Federation attention was called to the inconvenience of the practice of some Architects receiving tenders without opening them in the presence of the parties, and the following resolution was passed :—

> " That this Federation deprecates the growing practice by Architects and others of receiving tenders without opening them in the presence of those tendering."

I have been instructed to ask you to be kind enough to bring this resolution to the notice of your Council at the first convenient opportunity.

If the unsuccessful competing Builders knew that any particular job had passed them, it is probable that the next tender they sent in would be at a closer figure ; it would seem therefore that it should be in the interest of Architects and their Clients that Tenderers should immediately know how they stand.

Yours faithfully,
(*Signed*) A. G. White,
Secretary of The National Federation of Building
Trades Employers of Great Britain and Ireland.

Koh-i-noor House,
Kingsway, W.C.,
18*th September*, 1913.

The £150 Cottage.

Sir,—Mr. Heaven and I must agree to differ on certain points of detail I have raised and on which I still retain my first opinion. He has yet not succeeded in satisfying me that his cottage can be built for £147, but I am open to conviction and if he will come down here and terms can be arranged, I am prepared to place a suitable site at his disposal such as will accommodate 100 of these cottages, on condition that, combined with my ideas, he can bring the first two out at the price named.

Frank Windsor, m.s.a.

1, High Street, Croydon,
October 9th, 1913.

A note has recently appeared in several newspapers to the effect that Mr. J. St. Loe Strachey offered that if anyone could build a cottage, on land which he would provide, for £100, he would buy it for £110 if it stood a year, and that Mr. Arnold Mitchell, had accepted his challenge and put up a cottage in brick and tile which was a " perfect wonder." It contained three bedrooms, kitchen-parlour, scullery, and offices. It was so obviously stable that he had waived his right to wait a year and had paid Mr. Mitchell his £110. The cottage was built in seven weeks by a London firm.—[Ed].

The Origin of the Word "Transept."

Sir,—In the preparation of the Oxford *New English Dictionary*, we have as yet failed to find the origin of the word *transept*. Our first quotation is from *Leland's Itinerary* 1538-42 (ed. 1907) III. 239, where under Crediton, it is mentioned that a certain person was buried "in the north transept." Then we have not found the word for more than 150 years, when it is used by Anthony Wood, of Oxford, 1692, as *transcept*. Leland may of course have invented the word, and Anthony Wood may have taken it from his *Itinerary* ; but this seems unlikely. One would suppose that there must have been an Anglo-Saxon *trans-septus* or *tran-sceptus*. in use ; but we have found no trace of it, I have also asked in N. and Q., with (as yet) no result.

Could you bring the matter before your Society, and ask any member who has information on the history of the word to communicate with me. We are anxious not to leave the word in the darkness which seems to enshroud its origin and early history.

Yours very truly,

Oxford, *October 22nd*, 1913. James M. Murray.

We hope any member who can assist Sir James Murray will communicate with him direct.—[Ed.]

The South African Registration Bill.

Sir,—The vast area of this country and great separation of the larger centres by distance is proving a real lion in the path of promoting an Architects' Bill before Parliament. This is greatly accentuated, in my opinion, by the voluminous and too extensive characters of the most recently proposed Bill, which in its latest form is the work of some of the enthusiastic members of the Association of Transvaal Architects (*i.e.*, the only registered body). This proposed Bill seeks to entirely embrace all the liberties and opinions of anyone calling himself an "architect" whether practising or salaried. Registration and proper qualification is aimed at, but these important details are being drowned in a mass of other matters irrelevant to them, and the Bill is of a very composite and mixed character, and will prove to be a bolus which Parliament will have difficulty in swallowing, checking and limiting as it does the energies of a profession which has never before been so treated.

Having had experience of two Registration Bills, one here and one in Australia, I feel certain that the substance is being lost for the shadow, and the very complexity of the interests involved and assailed in the Bill will prove to be the leaks which will sink the ship.

There is no reason why one Institute should have *complete* control of the profession apart from the important matters of registration, qualification and misconduct. It would not ultimately help the spirit and practice of architecture. Each University in Great Britain, for instance, confers degrees and controls itself, but does not control any of the professions for which it trains candidates, neither does any Society exercise such a dictatorial domination.

Our Union Bill should be cut in two—the first and separate Bill should establish a Council which can deal with registration, qualification and misconduct, and proper appeal should be allowed from decisions of such a Council.

The Second Bill should establish a South African Institute of Architects under Charter in which membership should be voluntary. The first establishes a judicial body, and the second a body dealing with professional interests which at times clash, and no man should be forced to belong to this body if against his interests or his convictions. The first is clearly in the interests of the general public, and the second in the interests of sections of architects, probably numerous, and should on no account be forced on individual protestants.

Johannesburg, Edward H. Waugh, m.s.a.
24th September, 1913.

The Plate Glass Problem in Shop Architecture.

A correspondent in *The Times,* in the course of an article on "The Development of Shop Architecture," says the vast size of a modern "store" demands windows of a proportionate expanse, and the task of the architect is at once to provide such windows and to ensure that they shall not be too blatantly obtrusive. A really successful effect can be achieved only by the nicest calculations. An error in proportion or construction which might escape notice in a shop-front of moderate dimensions becomes uncompromisingly obvious when magnified to the scale entailed by a building such as Harrods.

Fortunately (for the "store" is becoming an increasingly prominent type of enterprise) the knowledge how to handle this problem is rapidly making headway, and high praise is due to the architecture of some of the new "stores," of which there have been several striking examples put up in London within the last few years. The new building of Whiteley's is one of the most recent. Selfridge's, again, is a handsome building which forms in several ways an interesting contrast with Whiteley's, but both buildings alike represent highly successful solutions of the problem how to handle the large plate-glass window. Another good solution to the same problem is provided by Waring's premises, which have been modelled on Hampton Court, and as a last example of a handsome "store" mention should certainly be made of the delightful Renaissance building of Debenham and Freebody.

But if the designer of a "store" knows that his building is bound to attract attention through its mere size, the shop architect should not aim primarily at producing anything which is too obviously meant to be "showy," or the result will be a street made up of incongruous, clashing, and over-bold structures. Fortunately the architect can in many cases reckon upon the sympathy of the best class of tradesman. It has now come to be realized that the better goods are in quality the more important it is that they should be shown in an artistic setting, and, further, that such goods are shown at an actual disadvantage if they are crowded too much together. The 200 yards or so of Old Bond Street between Piccadilly and Old Burtington Gardens contain four examples of first-rate shop architecture beyond which it is not necessary to go. The first example is the tobacconist's shop of Messrs. Sandorides, with its four exquisitely moulded arches and the rich ironwork which fills the upper part of these arches. The second example is the shop of Messrs. Duveen. The elegance and richness of the French woodwork which forms its frame are exquisite, and though the windows are often bare of any goods whatever, the handsome panelling leaves one almost indifferent as to whether any priceless *objets d'art* are being shown or not. The shop of Messrs. Crichton next door is the third illustration. This shop is really a masterpiece on the part of the late Mr. Flockhart.

On the ground floor the design is almost identical with that of Messrs. Duveen's shop, and the treatment of the first floor, while differing in detail, resembles its neighbour in general effect. In the two stories above the design is entirely different. The result is at once charming and dignified, and is an admirable illustration of how an architect, without sacrificing individuality, can make his design suitable to its surroundings. The last example is the perfume shop of Messrs. Atkinson. The deliberately massive appearance which has been given to the building by its stone casing and the comparatively small size of its mullioned windows suggest somehow an idea of cool fragrance which is thoroughly appropriate. In each of these, and in many other examples which could be given, the predominant characteristic is a certain rich refinement, which blends so quietly with the general surroundings that its full beauty is not always recognized at a first glance, but, when once apprehended, is more and more appreciated.

To what extent and with what rapidity this improvement in shop architecture may be expected to develop it is impossible to predict. There are innumerable factors to be taken into consideration, and these factors vary not only in different towns, but in different parts of the same town. The omens, however, appear on the whole to be distinctly favourable. Where distinguished firms have led the way others will surely follow. The increasing number of highly-educated men and women who are taking up posts as heads of commercial enterprises ; the demand of the public that its shopping shall be done in pleasant conditions ; the growth of knowledge and experience amongst architects in the treatment of commercial architecture ; the spirit of reasonableness which, on the whole, has manifested itself throughout the discussion on the rebuilding of Regent Street Quadrant—all these are so many grounds for hoping that the reckless disregard for beauty which marked shop architecture in the 19th century will give way to a recognition of the fact that a shop need not be ugly in order to be commercially attractive.

St. Paul's Cathedral.

Visit of Inspection.

By kind permission of Mr. Mervyn E. Macartney, F.S.A., Architect to the Dean and Chapter, a very interesting visit of inspection was paid to St. Paul's Cathedral, on October 2nd, by the Council and Officers of The Society of Architects. The purpose was to see the operations in progress for grouting the masonry, under the direction of Mr. Macartney and Sir Francis Fox, consulting engineer, now being carried out by Messrs. John Thompson & Son, of Peterborough; and the works of regilding and decoration to the ball and cross, the golden gallery, and western campanili, in course of execution by Messrs. J. W. Gray & Co. The visitors were received at the north-west entrance to the crypt by Mr. Halley, of Mr. Macartney's staff, who explained that for some time it had been observed that the fabric was sinking towards the south-west, partly owing, it had been ascertained, to original variations in the subsoil, causing from the very first unequal subsidence, and partly due to the fact that, probably because of Wren's difficulties in procuring sufficient stone from Portland he only employed that material for facing purposes, filling in the core with bricks or masonry from the burned Cathedral, or with poor oolitic stone from Burford, Oxon. At present Messrs. Thompson's workmen were drilling holes in the masonry of each pier in the centre of the edifice, into which cement grouting was forced until no more could be retained. Mr. Halley showed the drilling and grouting machines at work, and the dated tell-tale strings on the piers, which demonstrated that movement was still in progress. The operations in the south-west of the crypt were inspected with great interest.

Proceeding to the ground-floor area of the Cathedral, the visitors observed that the deep western pier in the south transept is enclosed by hoarding, and going behind the barrier the party inspected, from ladders and scaffolding, the wide fissures in the masonry to be seen here in the haunches of the south-west vaulting. Passing down to the south-west end of the south nave aisle, the visitors followed Mr. Halley up the Geometrical Staircase and along the gallery over the aisle, and there examined the springing of the dome. Here still more extensive cracks were apparent, and the friable nature of the Burford stone was very evident. A long tunnel-like aperture, only 15 in. by 21 in., leading through to the brick cone between the outer and inner domes, and approached by a ladder, was illuminated, it being explained by Mr. Halley that only architects' assistants and young workmen were able to worm their way through. The members of the Society appeared to take it for granted that times were too prosperous to allow them to explore a corridor of such limited dimensions, and closer inspection was " taken as read." Passing up by wooden and iron staircases to the open eye at the crown of the internal dome, a bird's-eye view was afforded of the ground area, and it was also seen that the upper part of the inner dome is of brickwork in English bond, afterwards rendered in cement, and that the panels, the festoons within them, and the medallions above, are, like the elaborate vaulting over the nave of Milan Duomo, merely effects of scenic painting in fresco. A visit to the golden gallery, now in the painters' and gilders' hands, and to the interior of the ball. gave opportunities for seeing how thoroughly the regilding works are being executed, At the close, Mr. Tubbs, as President, voiced the cordial thanks of the visitors to Mr. Halley for his lucid explanations and to Mr. Macartney for giving the opportunity for so detailed an inspection.—*Building News.*

REGISTERS OF GRADUATES AND STUDENTS.

The following have been admitted to the respective Registers of the Society of Architects by the Council, under Article 13 :—

GRADUATES—

Ackroyd, Samuel William, 19, Abbey Walk South, Halifax.
Shibley, Albert Reginald, late 156, Bedford Street South, Liverpool.

STUDENTS—

Atkinson, Edward Arthur, 31, The Vineyard, Richmond, Surrey.
Slater, Reginald John Langham, 19, Bendish Road, East Ham, E.

Rust upon Paint.

From experiments made by Dr. E. Liebreich and Dr. F. Spitzer, as reported in *Die Umschau*, it appears, says *The Times*, that the general opinion that rust in iron is prevented by a cover of paint is not always correct, and that in fact the paint itself may be the cause of rust. During the experiments made it was found that polished steel bars, which had been given one coat of paint, and upon which distinguishing numbers were painted, rusted principally, and in some cases solely, in the place where they might have been considered doubly protected—namely, under the thicker layer of paint at the numbers. Five colours were then selected, and some iron plates were given one coat and some four coats of paint, each coat being perfectly dry before the other was applied. These were exposed during 24 hours to a jet of steam. The places with one coat remained intact, the others were completely rusted. It is surmised that this result is due to the fact that the varnish of the second coat dissolved the paint of the lower one and thus made it porous, and that the porosity increased with the number of coats applied.

A Woman's Appeal to Architects.

Mrs. M. A. Cloudesley Brereton in a paper on "Better Houses," read at a Conference during the recent Gas Exhibition at Earls Court, suggests that as it is the woman and not the architect who has to run the house when it is built some blanks should be left for her to fill up. Why do architects go on building houses with cookers, fires, and boilers dated 1800 for the up-to-date woman who has long passed 1900? I was talking at this exhibition a few days ago on this point to the President of The Society of Architects, says Mrs. Brereton, and he assured me that it was a woman's own fault that architects and builders felt it their bounden duty to finish off the house entirely before allowing the prospective tenant to put her nose inside it. He said that a house without a fireplace or kitchen range looked so unfinished, and that it was therefore, considered better to plump down the stereotyped coal range and coal fireplace, because, if the future tenant wanted a gas fire, it was so easy to put one in front of the coal fireplace. With all due respect to Mr. Percy Tubbs and his learned profession, I must say that this struck me as wanting in a knowledge of womankind, and as no small reflection on their powers of imagination. As to the latter point, any woman can very well imagine what a blank fireplace recess would look like if she could place in it, or have placed in it, the particular fire, whether for coal or gas, upon which she had set her heart, in case she ever moved; while to see a hopelessly out-of-date coal grate instead of a blank space simply fills her with something akin to despair, because she knows by bitter experience how much easier it is in domestic matters to get what you want if there is not something already in possession which has to be dethroned and discarded.

I appeal to architects to advise builders of modern houses, where the ultimate desires of the tenants are unknown, merely to finish off neatly with the cheapest possible cement the fire places in the sitting-rooms and bedrooms, and the recess for the cooker in the kitchen, and to leave the incoming housewife some scope for suggestion. In this way a certain amount of money would be left to the landlord to meet the tenant as to these necessary fixtures, which would otherwise be wasted on putting in old-fashioned stoves merely for them to be covered up with modern ones at the tenant's expense.

Where a house is being built to order for some special tenant, the architect's way is, of course, clearer; but even here he might be of great service to the mistress of the house if he would place his knowledge and experience at her disposal, and attempt to enter into, not only the building of her house, but the service problems which are likely to arise, and which he can, if only he will, reduce to a minimum of difficulty.

St. Mary-at-Hill.

This church, which combines the parishes of St. Mary-at-Hill (so called on account of the ascent from Billingsgate to Eastcheap), and St. Andrew Hubbard, lies between two streets leading off Eastcheap, its east front being in St. Mary-at-Hill, and its west front in Love Lane.

The Great Fire reached, and partly destroyed this and the neighbouring church of St. Andrew Hubbard, which stood also in Love Lane near the west end of St. Mary-at-Hill; St. Andrew was not rebuilt, its parish being annexed to St. Mary.

The old Church was of very ancient foundation; it existed previous to 1322, and possessed nave and aisles, and a western tower.

The Abbot and Convent of Waltham had a chapel near to the church as appears from a licence granted by the Bishop of London. After the Great Fire, the church was rebuilt, the work being commenced by Wren in 1672, and finished in 1677.

The Tower remained practically intact after the fire, and the side walls, and west walls with their windows were all retained. Wren had only to deal with the interior, which he treated in a masterly manner as may now be seen. Much of the mediæval work was incorporated in Wren's design, but the church has been so much altered at various times that its appearance has, especially externally, been somewhat changed, great alterations being made in 1827-8, under James Savage.

The old tower, which is stated by one writer to have been in stone, was left standing until 1780, when it was considered insecure, and was then pulled down to make way for the present low squat tower of brick and stone quoins, a commonplace design altogether unworthy of the church.

In an engraving in the church vestry, is a view of the west end of the church showing a brick tower having an octagonal turret at the north-west angle carried above the parapet, and on the tower flat a lantern of wood and lead; the windows both of the tower and of the west walls are Gothic, the latter windows being pointed and filled with tracery.

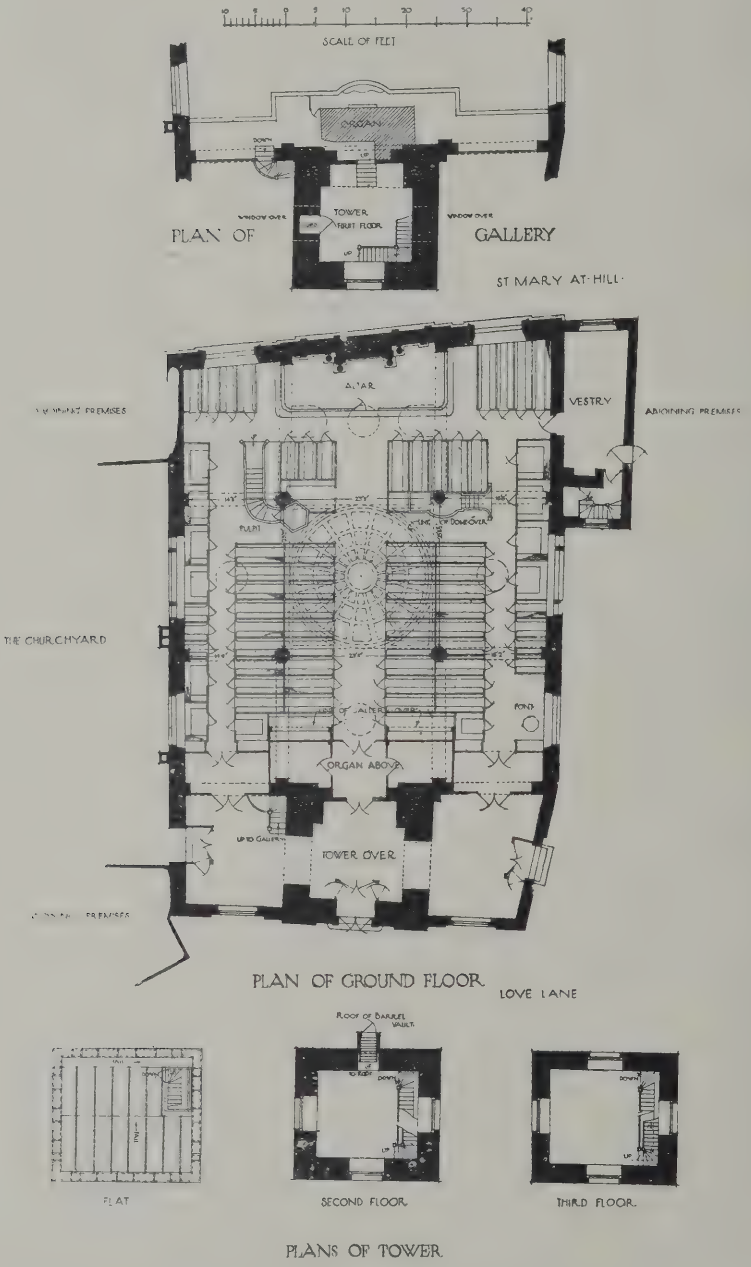
This engraving must have been previous to 1780, the date given for the pulling down of the stone tower, and indeed, bears the arms of Wm. Beckford, whose name is given on two of the sword rests in the Church, and who was twice elected Lord Mayor of London in 1762 and 1770; so that the evidence is rather adverse to the old tower being of stone.

One wishes, however, that the quaint old tower had been rebuilt in place of the existing unworthy appendage.

The Plan of the Church is practically that of a cross within a square, and may be considered one of the most beautiful and successful of Wren's productions. Over the four arms of the cross are barrel vaults and over the intersection is a cupola of

THE SOCIETY OF ARCHITECTS ARCHITECTURAL SCHOLARSHIP 1913

THE CHURCH OF ST MARY AT HILL BILLINGSGATE No 1

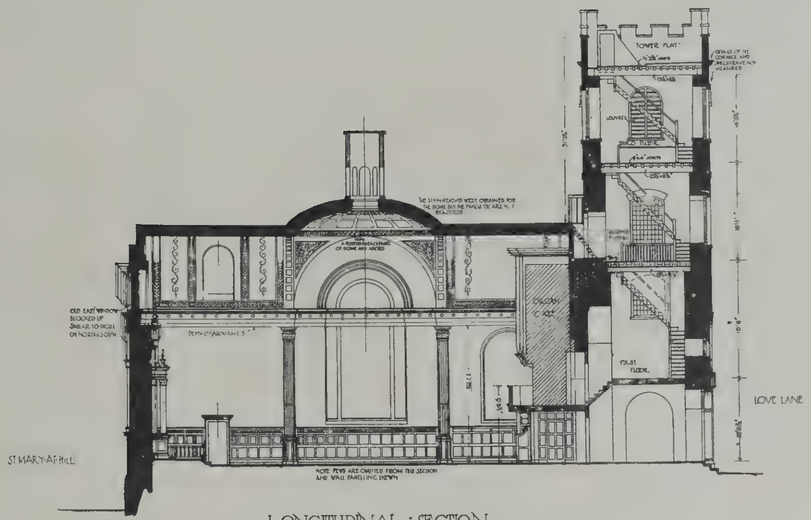


Measured Drawings by F. Milton Cashmore (Student.)

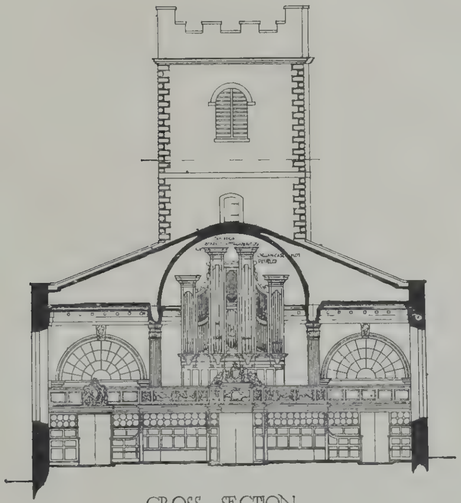
THE SOCIETY OF ARCHITECTS ARCHITECTURAL SCHOLARSHIP 1913

THE CHURCH OF ST MARY AT HILL No 3

SCALE OF EIGHT FEET TO ONE INCH


TOWER FLAT
DETAILS OF THE CORNICE AND ARCHITRAVE NOT MEASURED
LOUVRES
THIRD FLOOR
THE SLAB-HEIGHTS WERE OBTAINED FOR THE DOME BUT THE PANELS ETC ARE NOT MEASURED
A SECTION OF THE PANEL OF DOME AND ARCHES
OLD EAST WINDOW BLOCKED-UP SIMILAR TO THOSE ON NORTH & SOUTH
DEPTH OF ARCHITRAVE 5"
ORGAN CASE
FIRST FLOOR
LOVE LANE
ST MARY-AT-HILL
NOTE PEWS ARE OMITTED FROM THIS SECTION AND WALL PANELLING SHEWN

LONGITUDINAL · SECTION



CROSS SECTION
LOOKING TOWARDS GALLERY FRONT

MEASURED DRAWINGS BY F. MILTON CASHMORE (STUDENT).

good design carried on pendentives, and over the four square compartments are flat ceilings.

The columns at the four points of intersection are of a type employed only by Wren in this instance, and are described by Hatton as being " of no order at all, but a specie partly composed of the Dorick and Corinthian." They are raised on pedestals as high as the pews, and are fluted and cabled.

One striking point in the design is that an architrave is used with a quite small top moulding, instead of the usual frieze and cornice, and that it runs continuously around the Church.

The Church is particularly rich in the possession of beautiful fittings, most of which, however, are of much later date than the fabric, having been executed by William Gibbs Rogers (who was afterwards employed by Sir Gilbert Scott, on St. Michael's, Cornhill), in 1848-9, during the Rectorate of the Rev. John Crosthwaite.

The Rector's Pew and Reading Desk are noteworthy for their carved open tracery, and brackets supporting the Lion and the Unicorn, each bearing shields on which is carved V.R., 1849.

The Pulpit on which Roger's name may be seen, is of most elaborate workmanship, and contains some very well executed carvings. The gallery front is ornamented with groups of musical trophies with boldly carved clusters of fruit and flowers. The Royal Arms with a scroll about 10 ft. long form the central feature of this fine piece of work. The lofty Altar piece is also good, and is a fitting worthy of its position. The gallery contains an organ, rebuilt by Hill & Sons, which is a large and finely toned instrument, and is peculiar in having the usual order of keyboard reversed, the natural notes being black, and the sharps and flats white.

The church still retains its Corporation Pews, which are to the right and left of the central aisle, directly under the gallery, and are dominated by sword rests, for the number of which the church is remarkable, there being six. There were originally four, but two more were added about twelve years ago, when the Church of St. Botolph, in Botolph Lane, was pulled down.

The Church was closed about twenty years ago for some time, during which period over 3,000 bodies were removed from under the Church, and re-interred in Norwood Cemetery, and the re-opening of the Church was attended in State by the Lord Mayor and Sheriffs in 1894.

Brand, the author of *Popular Antiquities*, who was a member and Secretary of the Society of Antiquaries, was Rector of St. Mary-at-Hill from 1789 until his death in 1806, and was buried in the chancel. A tablet to his memory is on the east wall, south of the Altar.

The present Rector is the Rev. Prebendary W. Carlile, and the building is associated with the work of the Church Army.

F. Milton Cashmore, Student, S.A.

Mainly about Members.

We regret to announce the death of MR. ROBERT SINGER HYDE, of Worthing, who was for some years partner with the late Mr. Edmund Scott, F.R.I.B.A., of Brighton, during which time many works were carried out to their designs in Brighton, including St. Bartholomew's Church (which has the highest interior of any church in England) and the Chapel Royal. Subsequent to 1882 the late Mr. Hyde practised at Worthing, among his works being St. Botolph's Church, Heene, and recent additions thereto, the restoration of St. Paul's (known as the Chapel of Ease), St. Matthew's Church, the internal alteration and decoration to Christ Church, the spire of Holy Trinity Church, Holy Trinity schools, Sussex Road schools, Little High Street schools, Worthing Post Office, and a number of large villas at West Worthing. Mr. Hyde was the borough surveyor during the year the town received its charter. In addition to the above-mentioned works, he carried out many designs in Worthing and in the county of Sussex. By his decease the town loses an artist, an old practitioner, and one of the oldest and most respected citizens, and the Society a member of seventeen years standing.

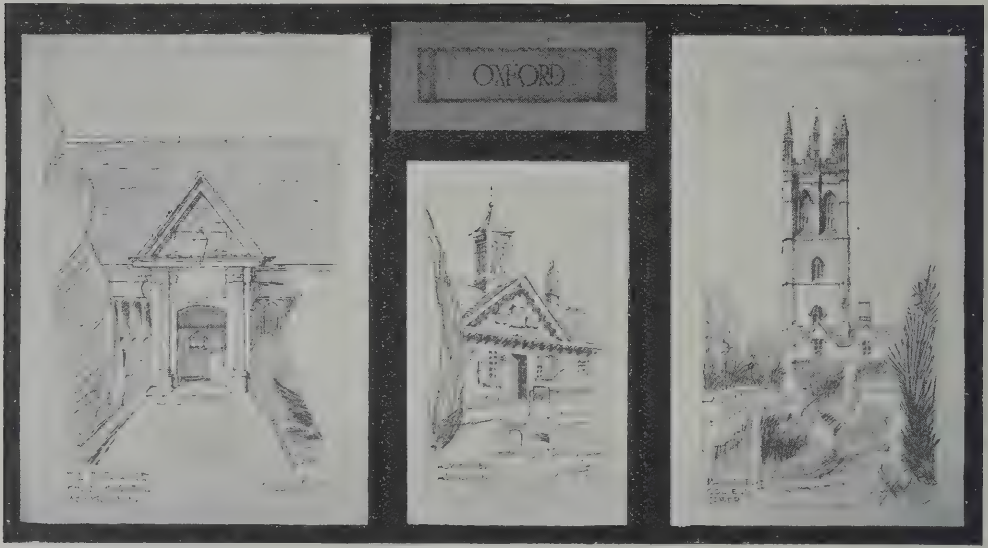
MR. A. W. VENNER, is the architect for the new buildings which have been erected in Station Road, Redhill. The façade is in Monk's Park stone.

An intermediate school for girls at Aberdare, built at a cost of £14,000, has been formally opened from designs by MR. J. H. PHILLIPS, of Cardiff.

The plans of MR. F. HOWARTH have been selected for the new day and Sunday schools, which are to be erected in Ribbleton Avenue, Preston. The estimated cost of the work is £4,000.

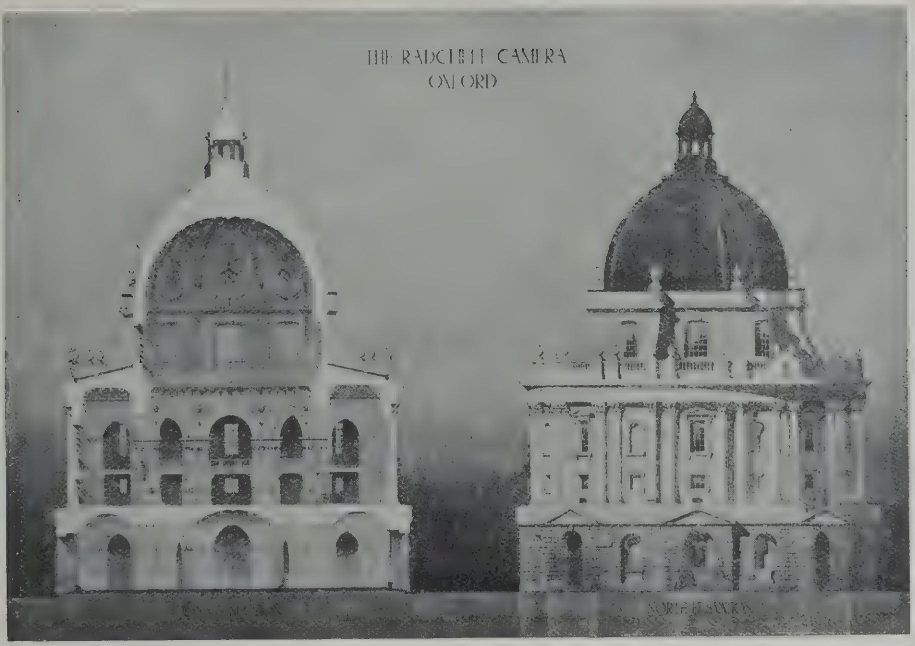
MR. R. L. ROBERTS, of Abercarn, is the architect for the new Institute at Cwmfelinfach, which has been erected at a cost of about £11,000. The building contains a swimming bath, reading room, library, billiard rooms, offices, and many other rooms.

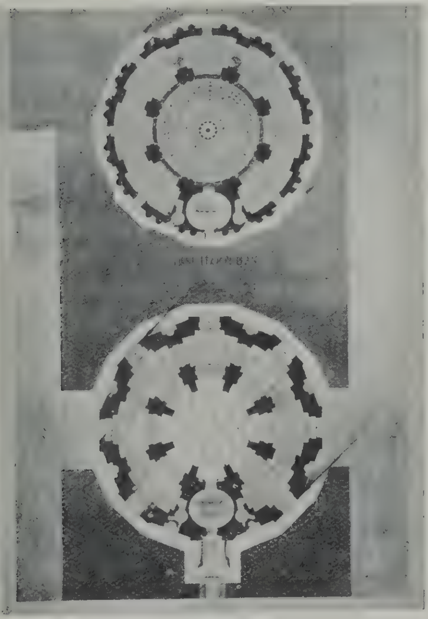
MR. P. D. STONHAM, of Eastbourne, in the course of an interview with a representative of *Tee Square and Tape*, expressed the view that there is an immense field for architects in Cinema work. In his opinion, the first essential is a well-furnished comfortable hall, and that as the main object is to be able to see the pictures, lavish decoration of the building is unnecessary. Another essential is good ventilation, and while an advocate whenever possible for natural ventilation, Mr. Stonham considers that mechanical aid is necessary in this connection.



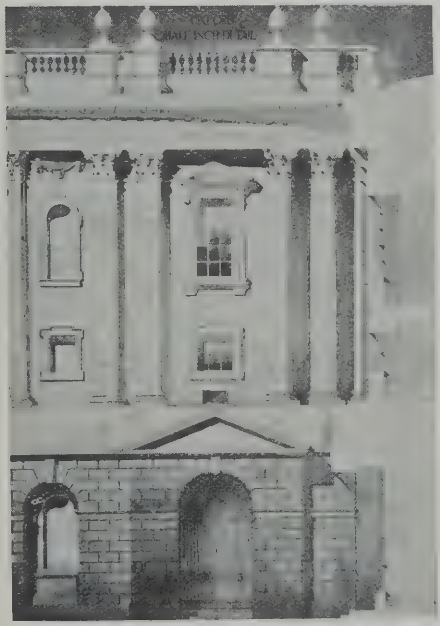
Abingdon and Oxford.

The Cotswolds and Worcestershire.
Some Sketches by A. L. Abbott (Student).





PLAN.



N. ELEVATION.

MEASURED DRAWINGS OF THE RADCLIFFE LIBRARY, OXFORD. BY A. L. ABBOTT (STUDENT).

A new picture hall is about to be built on a site with a 72 ft. frontage to North Parade, Bradford, near the centre of the city, and opposite the Theatre Royal. The front has been designed in a Renaissance treatment, with a central pediment and Ionic entablature. Local stone will be used. The central entrance opening leads into a large foyer, giving access to the main hall, staircases, and a specially-constructed roof-garden, which forms part of the café. The cafés and lounges are arranged on the first floor, over which are placed the smoke-room and kitchens. The main hall and balcony will seat about 1,400. Exits have been obtained at either end and on both sides. The architect is MR. H. W. ROGERSON, of Cheapside, Bradford.

No 106, High Street, Winchester, has just been completed from the designs and under the supervision of MESSRS. NEWTON & YOUNGMAN, Architects, Bournemouth, for Messrs. D. C. Edmonds & Sons, Drapers, Winchester. The elevation to the High Street has been executed with dark red sand-faced bricks and Bath stone dressings. The new accommodation provides a spacious and well-lighted shop, two large showrooms, two fitting rooms, a workroom, and office and packing room on the ground floor. The first floor comprises a large showroom extending the full width of the site, a fitting room and retiring room for ladies, as well as a commodious workroom over the rear portion of the premises.

Buildings are in course of erection at the corner of the Clifton and Beach Roads, Weston-Super-Mare, on the site purchased by Mr. T. J. Lennard, J.P., the present Sheriff of Bristol, and presented to Lennards, Limited, for the erection of a Holiday Home to be occupied by employees. The architects are MESSRS. BRIDGMAN AND BRIDGMAN, A.R.I.B.A., M.S.A., of Bristol, Torquay, and Paignton. The building will be four stories high, each a complete self-contained flat entered from a main staircase, and provided with covered balconies, overlooking the sea front. The floors and staircases are of fireproof construction, and labour-saving fittings are introduced, The exterior elevations are being faced with red brick and relieved with buff terracotta dressings.

The Maternity Hospital Buildings, Lower Clapton Road, N.E., have been adapted for the purposes of officials', waiting patients', and nurses' accommodation. New buildings have been erected in the rear, comprising ward blocks for fifty beds, in separate blocks of twelve beds each, and isolation block of two beds, together with administrative and laundry blocks. A feature is the distribution of the ward buildings on the site, each of one story, with north and south axis, whereby each block has ample provision of air and sunlight, and in favourable weather beds can be wheeled into the open. The scheme has been carried through under the expert advice of Dr. Donald Mackintosh, M.B., M.V.O., of Western Infirmary, Glasgow, and the building was designed and erected under the superintendence of MR. ALEX. GORDON, Architect, F.S.I., of Queen Victoria Street, E.C.

Mr. F. C. Hope, of Bradford, is the subject of a very long and interesting article in the *Bradford Weekly Telegraph*. He is the oldest local architect, having been in practice since 1857. He has twice been President of the Bradford Society of Architects, with an interval of twenty years between the two appointments. That his advanced age does not prevent his taking a practical interest in professional matters outside Bradford, is shown by his election to membership of the Society last year. Mr. Hope has a record of nine years service on the Bradford Town Council, and was Chairman of the Tramways, Baths, and Team Labour Committee. He is a prominent Freemason, being a P.P.G. Supt. W., W. Yorks, and a member of over fifty years' standing of the Lodge of Hope. This very brief reference conveys but very inadequately some idea of Mr. Hope's many and varied services rendered to the community during a long, busy and useful life, and the high esteem in which he is held by his fellow citizens.

The task of transforming a London mews into a pretty house fitted up with every modern convenience would not at first sight, says *The Daily Graphic*, appear to be an easy one. But it has been successfully accomplished by Mr. Stanley Barrett, who is converting some of the disused stables and waste plots of London into charming and commodious residences. One of Mr. Barrett's most notable achievements in domestic architecture is the pretty cottage in Grenville Place, built on the site of an unsightly stable. The principal room—formerly a stable—is a combination of drawing-room and dining-room, a recess in the rear providing accommodation for a dining table and chairs. The latticed windows are recessed inward, and underneath there is some excellent panelling, which conceals two small cupboards. The beams, rafters, balustrade, mantelpiece, and door supports are of old oak, removed from a country house of the early Jacobean period. An ingenious contrivance is a rail which runs round the walls of the room and serves at once as a plate and picture rail. The fireplace is built of red bricks, copied from Elizabethan models. The kitchen—a small but perfectly equipped apartment—has replaced the coach-house. The staircase is unusually wide for so small a house, and upstairs there are three bedrooms—all of them with splendid cupboard accommodation—and a bathroom.

Mr. F. Milton Cashmore, the winner of the Society's Scholarship, 1913, was educated at University College School. He was afterwards articled to Messrs. Moscrop Young, M.S.A., & Glanfield, A.R.I.B.A., subsequently assisting Messrs. Ashley and Winton Newman for a time. He is now in the Superintending Architect's Department (Schools Division) of the L.C.C.

Design Competition.

The Victoria League, of Millbank House, 2, Wood Street, Westminster, offer a prize of £25 for a design for a Banner. The competition closes on October 1st, 1914.

Advertisements in the Journal.

Members are reminded that they can considerably enhance the value of the *Journal* as a source of revenue to the Society, by mentioning the publication in communicating with the firms whose advertisement appears therein. By doing so the members make the *Journal* known as a useful medium between the producer and the consumer.

Ordinary Meeting.

The First Ordinary Meeting of The Society of Architects for the Session 1913-14, will be held at 28, Bedford Square, London, W.C., on Thursday, November 13th, at 8 p.m.

Agenda :—

1. Minutes.
2. Nominations and Announcements.
3. President's Address.
4. Presentation of Students' Prizes.

Concert of Chamber Music.

A Concert of Chamber Music will be given on Wednesday, November 19th, 1913, at 28, Bedford Square, W.C., at 8 p.m., under the direction of Mr. Noel D. Sheffield (Member of Council). The Programme will include Quartette (Grieg), two violins, viola, violincello. Quintette (Rheinberger), two violins, viola, violincello, piano. Piano solos (Liszt, Schumann). Vocalist, Mr. B. Culmer Page (Member).

Members may introduce a friend (Lady or Gentleman), and as the accommodation is limited, it is asked that those who propose to attend will notify the Secretary in good time. Morning dress will be worn.

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The Society is not, as a body, responsible for the opinions expressed by individual authors and speakers.

The Statutory Registration of Architects.

Last June the Society issued a statement giving some reasons why, in their opinion, it is in the public interest that Architects should be registered.

This was followed up by a newspaper propaganda which was the means of calling public attention to the subject and of interesting Members of Parliament and others in the Society's proposals, and of preparing the ground for further action.

Details of this appeared in what was practically a "Registration" issue of the *Journal* in August last.

The Society have for close on thirty years held the views set out in that statement, and in support thereof have from time to time promoted a Bill in Parliament, on lines which provide for the protection of all vested interests, for the attainment of that object.

For the past two years the Society have, for reasons which have been generally understood and appreciated, temporarily suspended their activities in this direction, but in view of recent developments immediate further action has been decided upon.

The Society's draft Registration Bill, which has in the meantime been revised and brought up to date, has been placed in the hands of an eminent Counsel for completion, and all arrangements made for again introducing the Bill into Parliament at the first opportunity.

The support of all Architects who favour the principle of Statutory Registration is invited, and the co-operation of the members of the Society in particular will be of invaluable assistance to the Council in the furtherance of their proposals, regarding which, further details will be issued in due course.

Proceedings.

The First Ordinary Meeting of The Society of Architects for the session 1913-14, was held at 28, Bedford Square, London, W.C., on Thursday, November 13th, 1913, at 8 p.m.

The President, Mr. Percy B. Tubbs, F.R.I.B.A., having taken the Chair, it was resolved that the Minutes of the Special General Meeting held on October 16th, 1913, as printed in that *Journal* be confirmed and signed.

Ten nominations for Membership were announced, and a ballot was taken for the election of the following Candidates for Membership, and was declared to be unanimously in their favour :—

Bowley. Blewitt Benjamin, Salisbury, Rhodesia.
Pearce. Joseph, Royal Insurance Buildings, Liverpool.
Richardson. John Blythe, 6, Priory Place, Doncaster.
Spencer, Thomas, 14, Grosvenor Gardens, East Sheen, S.W.

It was announced that the following Candidates had been admitted to the Register of Graduates by the Council :—

Harland. Norman Gregory, 45, Rushmore Road, Upper Clapton, N.E.
Smith. Sydney Richard, 145, High Road, Streatham, S.W.

The President, Mr. Percy B. Tubbs, F.R.I.B.A., then read his Presidential address, at the conclusion of which a brief discussion took place on some of the points raised. On the proposition of Mr. Ellis Marsland, seconded by Mr. G. A. T. Middleton, A.R.I.B.A., and supported by R. Goulburn Lovell, A.R.I.B.A., Mr. Salisbury, and other members, a hearty vote of thanks was accorded to Mr. Tubbs for his address.

The President presented to Mr. A. L. Abbott, the Society's Silver Medal and Money Prizes awarded to him as the winner of the Society's Travelling Studentship and Scholarship Competitions. Many of the drawings executed by Mr. Abbott and other Students were on exhibition.

The proceedings then terminated.

Coventry Technical Institute Competition.

Members of The Society of Architects are advised that the conditions of this Competition are unsatisfactory in certain respects and that efforts are being made to get them amended. The attention of members is drawn to Clause 4 of the Society's Code of Ethics, in relation to this Competition.

Registration News.

The Standard of Qualification in America.

The changes in the system of Irish Government, which many persons believe to be immediately impending, once again directs attention to the urgent need for some scheme of Architectural Registration in this country, and the possibility of a change of Government proving favourable to the movement. Indeed, changes, or impending changes, of Government usually favour such endeavours, for the new Governors, or would-be Governors, are commonly more pliant than others ; indeed, Architectural Registrationists might take heart of grace from the Suffragettes, who have succeeded in extracting from Sir Edward Carson a promise that in the event of his establishing a Provisional Government in Belfast he would grant the franchise to women. While it is premature to make any exact calculations as to coming political events, it behoves the friends of Registration to be alive to the situation, and not to let slip any favourable opportunity.

The intimate connection of Ireland with the United States renders changes there of more than passing interest here. The legislation lately proposed in the State of New York, by means of which it is proposed to regulate the practice of architecture there, has given rise to much discussion. The primary purpose of the Bill is the protection of the public against the unscrupulous and incompetent architect, and it proposes the appointment of a Board of Examiners who shall determine the qualifications of each candidate to practice, and if these are satisfactory a certificate will be issued.

The qualifications required in the case of architects who have not been in practice in New York for at least two years prior to the passing of the Act are very exacting. Before being granted a certificate, the candidate must give proof of study in an approved High School, he must have followed higher courses in mathematics, history, and one modern language. In addition he must submit evidence of *at least* five years' practical experience in the office of an architect of repute. After complying with all these requirements, he is required to pass an examination in such technical courses as are prescribed. The Board may, however, waive these requirements, and recommend the granting of a certificate to a candidate who holds the diploma of a recognized architectural school, and who has had at least three years' practical experience in an architect's office, *after* the completion of his technical course.

The certificate of another State, whose educational standard is not lower than that of New York, entitles the applicant to registration.

One object of these severe tests is to ensure men who will be well qualified to the performance of the technical work, and whose liberal attainments will enable the calling to be ranked amongst the " learned professions."

In this connection it is interesting and instructive to note the remark in the able and luminous address of Mr. Curtis-Green, the President of the Architectural Association, London, that "architecture is no longer the easy means of livelihood it once was," and that as the test becomes more severe, so will entry into the rank of the profession become more and more restricted as regards numbers. That is well, and in a degree comforting, for otherwise there was the likelihood of the profession becoming overcrowded and swamped with men desperately intent on securing a bare livelihood at all costs, a condition not conducive to progress in the arts.

Our contemporary, *The American Architect*, speaking of the proposed legislation, comments on the pressing need for uniformity of enactment and practice in the various States of the Union, some of which have very loosely considered schemes of registration, and urges upon those States which have a lower standard than that proposed for New York, to level up to it. That standard, says our contemporary, if exacting, is not too high for the best interests of any State in the Union, and, if so, it is assuredly not too high for Ireland, although it might at first have to be compassed by easy stages, but a very low standard would certainly be worse than none at all. "The need for legislation to protect the public," says *The American Architect*, "is becoming so generally recognized, that the time seems to be favourable for well advised and uniform legislation." The value of our contemporary's remarks lies in the fact that they emanate from a land where architecture in its modern form has been carried to the highest perfection.—*The Irish Builder and Engineer.*

Registration Accomplished in New Zealand.

In the October issue of the *Journal* we published a Memorandum issued by the New Zealand Institute of Architects, in support of a Registration Bill promoted by them, and which passed its second reading last July.

The Bill has since became an Act, the New Zealand architects having accomplished in one year what we have been agitating for at home for thirty years.

The New Zealand Bill had the advantage of being in the hands of a member of the Government and was practically a Government measure, but the promoters had to overcome opposition from interested parties though they did not have to face dissension in the profession, nor were they hampered by questions of architectural politics, such as unfortunately obstruct progress here. However this may be, the New Zealand Institute of Architects will receive the hearty congratulations of all supporters of the principle of Statutory Registration of Architects.

Registration in Alberta.

Mr. Rowland W. Lines, M.S.A., President of the Alberta Association of Architects, in welcoming the Delegates to the R.A.I.C. Convention at Calgary said, Alberta, although it is one of the youngest of the provinces, has the honour of being the second to recognize the necessity for registration of architects. In 1905 and 1906 we passed a bill through the Provincial House in Edmonton making it necessary for all architects practising at that date in the Province of Alberta to become registered. Architects who, subsequent to that date, wished to practise had to prove to the Examination Board of the Alberta Association their ability to practise. So that, gentlemen, in future we shall only have duly qualified men practising in the Province.

This example, I am pleased to say, has been followed by several other Provinces, and very soon I hope we shall have every Province in the Dominion with a Provincial charter, and therefore have registration throughout the whole Dominion, and in addition to that, I hope to see all the provincial associations affiliated with the Royal Architectural Institute of Canada. That is one of the most important things on which we have set our hands, and although it was commenced only two years ago, a great deal has been done. It has been done under the guidance and influence of the Royal Architectural Institute, and it will only be completed when we have every Province in the Dominion with a Provincial charter and everyone federated with the Royal Architectural Institute of Canadian Architects. When that is complete, we shall have an organization which we should be very proud of, because it will have a great future, and it will control matters of award in architecture throughout the whole Dominion.

Then there is the question of standardizing examinations throughout the whole of the Dominion so that it will be just as easy or just as difficult for a man to become a registered architect passing an examination in Quebec as in Alberta.

Then there is the scheme for the promotion of study for architectural students, and also for the general enlightenment and education of the public in architectural subjects.

Registration for practising as an architect makes it necessary for a man to become educated in architectural matters, and this will lead to very much better architecture in the future. As a natural consequence of this, we get a greater number of more qualified and more enthusiastic men in our profession, and we shall have, as an actual result a far greater number of well designed and finer buildings, which will be quite a national asset.

In no profession is it more necessary that the practitioner should be highly trained. An author will write a book, and after it is written, if it is considered no good, it is generally thrown away and nobody troubles about it. Another instance, a doctor makes a mistake on a patient and it is spoken about, but it is altogether different with an architect. An architect making a mistake builds a building that is a monument to him for generations, and it stands there for everybody to see, and is in the public view. So that you will see, it is necessary that an architect should be highly trained so that should there be any errors, they should be limited as much as possible.

Also you must remember the commercial importance and the wealth of any country is the trade in its buildings and its history is written in its architecture. It is, therefore, very necessary that the men who are going to portray the wealth and history of this country should be well trained, as well trained as can be found anywhere in the world and get as good an education as possible, and it is to this end we are forming our associations.—*Construction.*

Registration in America.

Because of the widespread interest now being taken in Registration, the Journal of the American Institute of Architects is printing excerpts from articles taken from journals which cover a large part of the world.

Reference is made to the fact that the *Journal of The Society of Architects*, for August, is largely given over to a discussion on Registration.

The Registration Bill prepared by the Washington Chapter of the A.I.A., has been submitted to the Commissioners of the District of Columbia, to which it is designed to apply. Subject to certain agreed amendments it is understood that the Bill will be presented to the Congress next month.

Sir Gilbert Parker, M.P., on Architects.

Speaking at the R.A.I.C. Banquet at Calgary, Sir Gilbert Parker, M.P., said " I have a profound regard for the profession of the architect, and am indeed glad to have the opportunity of saying a few words to men of your ilk.

" I expect shortly to visit Montreal in order to deliver an address at McGill University on the occasion of the anniversary of the founding of that well-known seat of learning.

" I have chosen for my subject on that occasion ' The Arts,' for I feel that in most new countries art does not have the same encouragement that it has in the older lands. Architecture has made wonderful strides in this country, because it has adapted the methods and beauty of the great artistic countries such as Rome and Greece to the exigencies of a utilitarian age.

" I would like to see a department of fine arts established in every university in Canada, and I am very glad to know that McGill University has lately founded such a department.

" Regarding the copyright bill, which was introduced into the British Parliament during the last session, and concerning the passing of which I have done my utmost, in spite of a good deal of opposition even from my own party ; I happened to belong to a party which is at present not in power in the old land, and it was my duty on nearly every occasion to oppose legislation proposed by the party in power. When, however, the copyright bill was introduced into the House I felt that I could not oppose it, because for the first time in the history of British politics there was protection for the musician, and for the first time there was protection for the architect.

" There were members, many of my own party, who strenuously opposed the passing into law of this bill. Members would not protect the composer from the pirating of his works, neither would they protect the architect from his works being copied. In spite of opposition, I frequently rose in the House and spoke in favour of the measure, pointing out that such a bill would assist and protect the writer, musician and architect as no other act of legislation had ever done before. Perseverance told in the end, for the measure finally passed the House of Lords and received the Royal assent.

" Architecture is the first expression of the human race, then come painting, sculpture and music. Your position is not less to-day, for your profession appears to me to be one that is getting nearer to the people themselves than any other profession in your country. Pictures are getting fewer, for most of the valuable masterpieces hang upon and adorn the walls in the houses of millionaires, hidden away from the sight of the man in the street. But your fine buildings are every day made an education to the poorest of the poor.

" The splendid edifices that your skill and genius erect will last for all to see them, and learn the splendour of their beauty. Historic places such as the ancient cathedrals of the old land and on the Continent, mansions erected in the far away ages by the nobility of England, and fashioned by the hand of men like Christopher Wren and Grindley Gibbons, will last and endure when paintings and perchance music may have passed into oblivion. Take your profession seriously ; look upon it as a profession that tends above all others to elevate and educate the minds of men and women.

" I have to construct just as you have to do, for every book of mine, such as it is, is an attempt at architecture. We are one in our failures and successes. You who represent the whole Dominion, and make the people realize and understand that culture and beauty go hand in hand with utility, the rewards that you receive, namely the satisfaction of your own ideals and the satisfaction of the eternal elements of beauty ; these are indeed the greatest and most precious rewards that you can gain in all the failures and successes of your career."—*Construction.*

The Society of Architects.

Presidential Address by Mr. Percy B. Tubbs, F.R.I.B.A.

LAST year when delivering my inaugural address, I had occasion to thank you for the great honour you did me by electing me your President. Now I have again to thank you for what I regard as a very high mark of your confidence and esteem inasmuch as you have still further accentuated that honour by re-electing me to that office. Let me take this opportunity of thanking the Officers and Members of the Society for the valueable assistance rendered me in the discharge of duties which otherwise I should have found exceedingly onerous—if not almost impossible to perform.

In surveying our work of the past year, I personally attach most importance to that part of it connected with the formation of a Committee for the founding and establishing of an Atelier in London, run on similar lines to those attached to the Ecole des Beaux Arts in Paris, which is now *un fait accompli*, and about which I shall have something to say later on.

In my last address I made a suggestion that there was room for two professional Societies to look after the best interests of our profession. Since then, I have had twelve months in which to consider more fully the matter, and although I read with great interest a considerable amount of adverse criticism in the professional press, I see no reason to alter the view that I then expressed ; in fact, if anything I feel more strongly on the subject now than I did then, and I should very much like to see representative Committees of both Institutions meet to consider the question in all its bearings.

Having always taken a deep interest in matters relating to the general welfare of our profession it is only natural that during my period of office, under a sense of noblesse oblige, I should have given the matter much closer consideration than heretofore with a view to ascertaining if there are any practical means within our reach, the adoption of which would enable us to raise the status of our profession and the standard of its work.

I believe that such a policy does exist, but its efficacy must rely to a large extent upon the cohesion and solidarity existing in our ranks.

A United Profession.

As a profession we must stand united ; there must be unanimity of opinion and unity of action in all matters pertaining to the general welfare of the profession. Granted that for purposes of better administration, sub-division into numerous associations and societies is desirable, yet, in all matters of general importance to the profession we should work as one harmonious whole.

If all architectural bodies could only be brought into agreement on this point, I venture to think that nothing would conduce more to or more rapidly accelerate the interest and progress of our profession in every conceivable way. Therefore, the dominant chord I wish to strike in my address this evening is that of Unity, and until we get unity in the profession, and we are at least agreed among ourselves, it is almost impossible to make the headway that is demanded by the vast majority of the practising architects throughout the country, and by all those who realize the importance of architecture as an art, and the necessity for the proper education of architects and their protection.

Until we get a united profession it is almost impossible to deal effectually with such questions as the education and registration of architects, the proper government of architectural competitions, and the fixing of a scale of charges, which questions affect all architects whether members of any institution or not.

REGISTRATION.

I think that a very good starting point for this policy is the question of Registration.

The Society during the last few months inaugurated a press campaign in the interests of the compulsory registration of architects, and from the wide publicity given to the matter, we have been able to secure the keen interest of influential members of both Houses of Parliament, and of others deeply interested in the subject, but we are sadly handicapped through the lack of unity in the profession.

The benefits that would accrue from Statutory Education and Registration must be patent to all as in protecting the interests and raising the status of the trained and fully qualified architects, not only would the public have a guarantee of professional ability, but it would do more than anything else to get rid of those who to the detriment of the public do not hesitate to poach in a domain which by education and experience we ought to have the right to regard as strictly our own.

DEVELOPMENT OF THE SOCIETY.

In view of the rapid growth of the Society the Council thought it desirable last year to revise the Articles of Association, not only providing for present needs, but more particularly for its future development, and in doing so to form a new Graduate Class intermediate between the Junior Section and full membership. Entrance to the new class to be by examination only.

It was felt desirable in dealing with the Junior Class of membership to set before them the necessity for qualifying for one of the higher classes as quickly as they reasonably could, and failing that to advise them to turn their attention to some other calling, as they were evidently not desirous of taking the profession up in earnest.

The result of this policy is just beginning to bear fruit, for the Council have found it necessary to intimate to a considerable number of students that their connection with the Society must lapse, unless they are prepared to take things more seriously.

Personally, I am of opinion, that although this will entail some financial loss and apparent decrease in the total membership, yet it must tend very greatly to strengthen the Society, and to raise the standard of admission.

A situation, naturally, has arisen for which it is difficult at the moment to suggest a remedy, inasmuch as in the absence of statutory registration such persons cannot be prevented from starting in practice as architects although they may be only partly trained, and not possess the full qualifications necessary for the position.

On the other hand the action which the Council has taken may result in arousing them to a sense of their responsibilities and induce them to further qualify for re-admission into this or some other architectural body.

At any rate it is obvious that the action of the Council in this matter is entirely disinterested and is in the best interests of the profession.

The additional disciplinary powers reposed in the Society by the new Articles will enable the Council to effectually enforce the main principles, laid down in the code of ethics adopted by the Society. All this must tend to the betterment of the Society as a professional body and to the advantage of its members.

PROFESSIONAL DEFENCE.

I am glad to see that the example set by this Society in promoting a Professional Defence Fund and the machinery for its administration, is being followed by kindred institutions not only at home but abroad.

The Society, up to the present, has not been called upon to take up any case, but the knowledge that such a fund exists has been of great service to members who have been able to call attention to the fact that the fund is actually in being, and that a very influential Committee has been formed ready to advise on any matter affecting the interests of architects. The very existence of this fund is evidence, I think, that this Society is desirous of affording its members every possible assistance, in protecting their best interests, and consequently the profession generally.

I sincerely hope, and feel, that your Council will see their way to add to this fund from time to time, so that in the event of our having to fight a case, we can see it right through without fear of being crippled through any lack of funds.

ARCHITECTURAL EDUCATION.

The part played by this Society in placing upon a working basis the proposals for the introduction of the Beaux Arts method of educating architects into this country, resulted as you all know in the formation of an influential committee to consider the whole matter—that Committee, which is now an entirely independent one—is working on a scheme which strikes at the root of the whole matter, and your Society will always be entitled to the credit of supporting a pioneer movement of such great potentialities.

Apart from what the Atelier has accomplished for the advantage of those who have placed themselves under its guidance, the Society has achieved its aim in enabling the Committee to call attention to a fault of the present system of architectural training, and to point to a remedy with such effect as apparently to cause architectural educational bodies seriously to consider the question. The result of all this is that we now see strong evidence of the main lines of the Committee's proposals being adopted, so far as circumstances permit at the moment. It is most earnestly to be hoped that all educational authorities will see the advantage of adopting Beaux Arts methods in the near future.

The Atelier in Wells Mews is being most enthusiastically supported by the students there, and one has only to attend the various exhibitions of the students work that are held from time to time to see the marvellous strides that have been made in these few months, in architectural composition and design.

It could not be hoped that such a scheme as this could be self-supporting from the start, and I hope that the Society will see their way clear to render the Committee all the assistance that lies in their power, and particularly that they will afford it financial support until such a time as the movement becomes self-supporting.

Similar Ateliers will, I firmly believe, at no very distant date, spring up in various districts round London, and possibly also preparatory ones in the provinces, and I hope and believe that they will ultimately be attached to a National School of Fine Arts.

There is no doubt that there is a demand for opportunities for further study of advanced design, where students who have completed the full curriculum provided in our various schools, and I believe that such an opportunity will be found in the Ateliers already in existence.

I am sanguine enough to believe that similar Ateliers will be started in connection with painting and sculpture, and this should lead to the Arts working together in a National School, as they undoubtedly should do, when we should not only see a vast improvement in the design of our buildings, but should also see sculpture and painting applied to them in a proper manner, and this can only be arrived at by intimate understanding between the workers in the various Arts.

MINISTRY OF FINE ARTS.

Last year, I expressed the opinion that the time was fast approaching when architecture will come into her own again, and resume that place in the public estimation which is her due, and which she enjoys in more favoured countries, and we see evidence of this in a movement which has recently been started. A Committee will, I believe, shortly be formed to consider fully the question of a Minister of Fine

Arts. Personally, I wish the movement every success, and I hope this Society will offer the movement any support in its power.

I cannot help thinking that if committees were formed in provincial towns with a central committee in London a great deal of useful work could be done in this direction, and, I believe, that the literature that they might publish, for the information of the general public, would very soon arouse sufficient interest for the government of the day to consider seriously the whole question; they might even appoint a Royal Commission to investigate the matter. I feel certain that a Minister of Fine Arts will be regarded in the near future as a necessity, and steps should be taken without delay, to bring the matter very clearly before the powers that be.

It is rumoured that the London County Council has already taken steps to appoint an independent architect, who will be available, free of charge, to advise Building Owners as to the suitability of their designs for any building on important sites in London, and one can at least express the hope that this will be the thin end of the wedge for the appointment of a Minister of Fine Arts, and that London's example will be speedily followed in other large cities.

Official Architecture.

In my address, last time, I had a good deal to say about Official Architecture, and I pointed out the desirability of every public building being designed by the one man in the country who was best able to solve the particular problem involved, and this one man can only be discovered by a properly organised competition.

If we are to get the best possible design and solution of a particular problem, competitions should be left as free and unfettered as possible; and the programme should set forth the requirements and make what suggestions are thought fit; but it should contain the fewest possible number of binding conditions. It follows, that if a competitor did not adopt the suggestions, he might possibly prepare an infinitely better scheme by working entirely on his own ideas; but this would mean that he would have no chance of success at all, if the conditions were binding, instead of, as I propose, making them merely suggestions.

Architectural Competitions.

If the promoters knew exactly what they wanted there would be no necessity for a competition, but as a rule, they have a vague idea what their requirements are, and if an architect, by departing from their suggestions, can show them a better scheme it surely is in the interests of the promoters to see such a scheme. Therefore the competitor should have as free a hand as possible.

There is a very great deal of useful work that could be done by the various Architectural Societies throughout the country in connection with competitions in the direction of the proper organization and regulation of architectural competitions. This is another very strong reason for unity.

I have yet to learn that it is a good thing for the profession that architects competing should have their designs published in book form and sold at the rate of four a penny. It seems to me that this has only to be carried far enough for people to cease altogether to require the services of an architect when they contemplate the erection of a small country residence, house, cottage, or other building that can be easily adapted to suit any site.

AN IDEAL LONDON ON PAPER.

Town planning schemes are being prepared in a great many districts round London, and if steps are to be taken to provide a Boulevard on the outskirts, there is no time to be lost. I, personally, have made a trip round London on about the seven mile radius, and I think, as far as the North West, North, and North East Districts are concerned it could be done at comparatively small cost, and it would prove, I believe, a real boon to London, and should be considered in connection with the town planning schemes now being prepared.

Another point which I should like to emphasize is the question of improvements to be carried out in our big cities. It seems to me that if a Committee of Architects could be formed to consider the maps of the various towns, in detail, and to lay down on the maps the street improvements which should ultimately be carried out when the opportunities arise, with due regard of course to the preservation of ancient monuments and fine old buildings, our towns and cities would ultimately become as beautiful as possible, and we should be all the time working to that end.

Had such a plan been in existence before the Great Fire of London, it would not have been necessary to consider, after the catastrophe the best method of rebuilding, as that would have been already settled, but as it was, they had no pre-considered scheme of improvement, and when it was decided what was the right thing to do, reconstructions had actually commenced and a grand opportunity was lost. We should all have been glad to have seen Wren's grand conception carried out. We must, I feel, be prepared, to avail ourselves of every possible opportunity of improving our towns and cities and to have a scheme laid down on paper so that when chances for making improvements come, we shall not have to start thinking what is best to be done, we should simply have to refer to the maps and carry out at least a portion of the settled scheme.

Again, when the great fire took place in the Jewin Street area of the City of London, improvements could have been made, and a large area of back land brought up to a valuable frontage which would have gone a long way towards paying the cost of the improvement scheme. As we are now situated, it is only when a catastrophe occurs that we have occasion to start thinking about improvements; whereas, if a definite scheme was in readiness for such emergencies, no time would have to be lost, and part of a thoroughly well considered scheme carried out instead of either rebuilding on the old lines or adopting a scheme not so fully considered.

SMOKE ABATEMENT.

What we, as architects, should try to do, is to beautify our cities as opportunities arise. We could make a start by giving all the support possible to the smoke abatement movement. This would tend to purify our atmosphere and give us more frequent opportunities of seeing our buildings under blue skies and brilliant sunshine, and enhance the charm of architectural beauty.

Our stone buildings would, then no doubt instead of weathering black on one side and white on the other, assume the beautiful tints they do in many Continental cities. We should encourage, on all possible occasions, the use of smokeless fuel, and if we did this in private houses a great deal of the smoke nuisance would be abated. As it is, I firmly believe that in London, the smoke arises more from the huge aggregate of private houses than from the factory chimneys.

CRAFTSMENSHIP.

Another very important matter which should receive careful consideration, is that of the encouragement of craftsmenship. As an example. One way of bringing this about would be to increase the responsibilities of the men entrusted with the work. I should like to see the man actually in charge of the work take his own particulars from the job, carry it out himself, and fix it at completion. A great deal of the interest which we see in mediæval buildings is due to craftsmanship. In those days the craftsman had a fairly free hand and worked out his own scheme for the particular work assigned to him, and it was left practically with all confidence in his hands by the Master Mason or the Architect, for the man entrusted with the work was known to be a competent craftsman, and his individuality was recognized and appreciated. Now, if a fine piece of work is carried out, the Firm which is employed takes all credit for it and the name of the actual individual craftsman rarely transpires.

It seems to me that the men themselves who have the greatest responsibilities in carrying the fine piece of work to a successful issue should be recognized.

A good example of this is told of a certain well-known architect, who, when he designed a Village Hall promised to recognize the merit of the workmen by having their names carved on one of the beams in the Clubroom. This is the kind of encouragement the men appreciate, and the Architect in question had every reason, I understand to be grateful to the men for the way his design was interpreted and carried out.

CONCLUSION.

In conclusion, I would again call the attention of my fellow members to the dominant note in my remarks this evening—UNITY !

I would like you to understand that the Council of this Society will always be ready to receive any suggestions that are likely to further this laudable object, which is of such great importance to the general welfare of our Profession.

It seems to me that such matters as Architectural Education and Registration, Architectural Competitions, a Scale of Charges, a Ministry of Fine Arts, Professional Defence, Official Architecture, and other matters which I have alluded to in my address, would be enormously helped if we could only be united and pull together in the right direction. Our greatest chance of success lies in our being a united profession, and therefore, I plead for Unity.

The President's address was reported at considerable length in *The Times, Morning Post, Daily Graphic, Daily Chronicle,* and *Manchester Guardian* ; and referred to in the *City Press, Leicester Daily Post, Public Opinion,* and other leading newspapers and journals.

Mr. Atherley-Jones, K.C., M.P., Hon. M.S.A.

There is reason to believe, says the *Times*, that the vacancy in the City of London Court, occasioned by the retirement of Judge Lumley Smith, will shortly be filled by the appointment of Mr. Atherley-Jones, K.C., M.P.

His appointment would necessitate the vacation of his seat in Parliament, and a by-election in the North-West Division of Durham, for which he was returned at the last election, by a majority of 4,171. It is interesting to note, however, that although this judicial office is one of profit under the Crown, Mr. Atherley-Jones would not be debarred by the acceptance of the appointment from sitting in Parliament. The position is an unusual one, since Judges of the High Court and County Court Judges are ineligible for Parliament. The City of London Court, however, is not a County Court. It is precisely analogous to the Burgess Court of Newcastle-on-Tyne, of which Mr. Atherley-Jones is at present Judge.

Mr. Atherley-Jones, who was born in 1851, is the son of Mr. Ernest Jones, the well-known Chartist. He was called to the Bar in 1875, and has represented North-West Durham as a Radical since 1885. He is well known in The Society of Architects as having been in charge of the Society's Registration Bill in the House of Commons. He is an Honorary Member of the Society, and a familiar and welcome guest at its Annual Banquet. He is also a member of the Registration Committee.

A Beautiful London.

"Good architecture in a city brings trade," said Mr. Percy B. Tubbs, the President of The Society of Architects, to one of our representatives. Mr. Tubbs had expressed himself as distinctly inclined to approve of the proposal made by the London County Council to appoint a consulting architect for all intending building owners in London. "Perhaps it is a pity that the consultations are not to be compulsory," he said, "but as a cautious first move it ought to do considerable good. It shows that architecture is coming into better recognition, and that the need to control it is being faced. There is no danger that so artistic and expert a man as Sir Ernest George, A.R.A., who is suggested for the post, would impose any individual eccentricities on the work submitted to him.

"However, in order that the full benefit of the proposal may be felt, building owners will have to get it out of their heads that good architecture is more costly than bad architecture. If they do not, they will be inclined to avoid applying to the consulting architect because they will incur extra expense.

"As to the co-operation which the London County Council might expect, there is no doubt that all good architects would give it fully. They have the interests of London as a whole at heart, and bad architects would have to fall into line. Then we might expect London to turn into a beautiful city, as indeed it is doing in some degree. The result would be that people would come to see it largely for the sake of its architecture, as many people go to Paris, and commerce would improve as a consequence. For good architecture is a national asset.

"I see also a most important aspect of this move. It might lead towards what we are all working for, a Ministry of Fine Arts. In any case, it would probably be imitated in all the great towns all over the country. There is no doubt that the profession of architecture will be served by any appointment which tends towards such a national end. At the present moment the atelier we have just founded is doing excellent work, and there is no doubt that a school of future English architects is fast coming into existence through it."—*The Standard.*

The President of The Society of Architects is the last member of his profession to put in a plea for the beautification of London. In theory all of us will be with him. It is only when we descend to the practical that difficulties present themselves. The idealist is never weary of urging the promulgation of what may be termed a town planning scheme for Central London—great broad thoroughfares converging at one point, imposing buildings, and noble monuments. But, alas! all thought of ways and means never enters his head. We have all heard of the sheep that has had to be killed in order to save its life. Somewhat akin to this is the dream of the idealist. London will be improved out of existence altogether if only he is given full scope for the enforcement of his theories!—*The City Press.*

A Ministry of the Fine Arts.

Mr. Percy B. Tubbs, F.R.I.B.A., the President of The Society of Architects, has much praise for a movement which is afoot to appoint in England a Ministry of Fine Arts, one of whose special missions it would be to put a check upon the growth of ugliness, wherever it showed signs of springing up or bursting forth. Part of his programme I like very much, the part in which he suggests that committees should be formed in provincial towns, with a central committee in London, with the view of rousing public opinion on this matter, so that the Government of the day may be made to realize that there is now a very strong feeling up and down the country that utilitarianism should not be allowed to have precisely its own way, as it seems to have in these present times.—*Leicester Daily Post.*

A meeting to consider the question of the advisability of forming a Ministry of the Fine Arts was held recently at No. 9, Conduit Street, W., and was attended by the following :—

Dr. David Murray, in the Chair; Sir George Frampton, R.A.; Mr. W. Reynolds Stephens, Chairman of the Imperial Arts League; Mr. Edwin Bale, Vice-Chairman of the Imperial Arts League; Mr. W. R. Colton, R.A.; Sir Frank Short, R.A.; Mr. Arthur Hacker, R.A., Mr. E. Guy Dawber, F.R.I.B.A., Professor E. Lanteri, Mr. Solomon J. Solomon, R.A., Mr. H. V. Lanchester, F.R.I.B.A., Mr. C. Stanley Peach, Mr. Wynford Dewhurst, Mr. H. W. Wills, F.R.I.B.A., and Mr. Henry T. Hare, F.R.I.B.A.

After considerable discussion the following resolution was proposed and carried unanimously :—

"That this Committee undertakes to consider the possible lines on which a Ministry of the Fine Arts might be advantageously formed, and if a satisfactory scheme can be evolved pledges itself to do its best to bring such a scheme into operation." An Executive Committee was also formed.

The Times.

The instinct to blame the Government when anything is not just as we would like it is a natural and human instinct, and most of us—especially when we are not particularly or chiefly interested in politics—indulge it to the full. It is curious how beneath it there is another and deeper instinct for turning over to the Government anything which is not doing too well in private hands. The Olympic Committee and some of its few subscribers think things are going badly with British sport, and immediately we hear grave suggestions for a Ministry of Sport. The President of The Society of Architects thinks (quite rightly) that architecture is not yet properly valued by the public in this country, and he announces as a remedy that a committee is to consider the advisability of a Ministry of Fine Arts. Of course the scheme of the country's administration ought not to be too rigid, and we ought always to be ready to enlarge it when a proved necessity arises. Such enlargements almost in our own day have given us the Local Government Board and the Board of Trade, and in the near future may give us some Ministry of National Insurance, or perhaps sooner than that a Ministry of Labour. We are already promised a Ministry of Land. But we ought to beware of creating fresh posts till the need for them is proved beyond doubt, and many people will hold that the principle of corporate public action in relation to the Fine Arts needs some better recognition from local government bodies than it has hitherto had before we could justify its representation on an already crowded Treasury Bench.—*Manchester Guardian.*

The South African Branch.

Annual General Meeting.

THE Annual General Meeting of the South African Branch of The Society of Architects was held on October the 20th, 1913, at the Board Room of the Association of Transvaal Architects, Winchester House, Johannesburg.

The attendance included Mr. M. J. Harris, President, and Messrs. Nicolay, Waugh, Beardwood, Burton, Veale, Sinclair, Hayward and Dowsett (Acting Honorary Secretary).

The Honorary Treasurer's Annual Statement presented by Mr. G. W. Nicolay, showed a credit balance of £57 8*s*. 8*d*.

Mr. M. J. Harris, the retiring President, in presenting the Annual Report said :—

Your Council has seen no reason to depart from the policy—initiated by its predecessors in office—of non-interference in matters of purely local concern unless at the request of the Provincial body of architects—Institute or Association—therein interested. South African in its geographical scope, our branch has thus avoided overlapping the spheres of the local institutes, and has concerned itself with the wider general interests of the profession, affording facilities for examination, offering incentives to scholarship and research, fostering good-fellowship, emulation and mutual instruction, and above all keeping touch with the thought and movement current in the main body of the profession.

Having regard to this last-named portion of our interests, it will be here in proper place to note the gratifying progress of our parent body. The Society of Architects (London), is about to enter upon its thirtieth year of existence. Founded in a country, where, to put it mildly, appreciation of architecture was rare, and architects but ill-organized to break down popular indifference, our Society was launched with a definite policy to raise the status and recognition of the architect. Much remains to be done to combat the general philistinism characteristic of British peoples, and much to be done to awaken our ill-organized profession to corporate sense and collective action ; nevertheless, our Society's record shows it as leading th van of the larger professional movements during all the years of its existence. Its influence has at last stirred even the dry bones of the older conservative organization ! Its vigorous pursuit of its original policy, its interest and influence upon architectural education, its active propaganda by means of that very bright publication, the *Journal*, of all that can make for our professional efficiency and advancement, constitute membership in our Society a valuable productive asset. It is—let me use a phrase once directed against it by a hostile critic as in satirical reference to a body of men practicing the most *ancient* of the great arts—it is an " up-to-date Society." As " up-to-date," no doubt, as were the schools of architects in ancient Greece and

Mr. M. J. Harris, the outgoing President of the South African Branch of The Society of Architects, is also Examiner in Architecture at the Transvaal University College, Hon. Secretary to the Transvaal Institute of Architects, and a Member of Council of the Association of Transvaal Architects. It will thus be noticed that Mr. Harris has the somewhat unique distinction of holding office in all three of the official organizations of Architects in the Transvaal, each of these organizations having its own sphere of work.

Mr. Harris is also Vice-Chairman of the City Improvements Committee of the Johannesburg Civic Association, Member of the South African Jewish Board of Deputies, but is perhaps best known as President of the Jewish Guild, a very popular local literary Society, in which capacity he has just been unanimously re-elected for a seventh year of office. He is one of the most prominent and popular Architects in Johannesburg, an excellent speaker, and one who is foremost in all movements for the betterment of his art, or the benefit of the Community.

Italy ; as " up-to-date," no doubt, as were the guilds of architectural craftsmen of mediæval Europe ; and, as we believe and trust, as closely in touch with current life and feeling, and as lively and beneficial in its influence upon contemporary artists and their enduring art.

Comparatively to the main body of the Society with its membership of over one thousand, our Branch is small, but so far as our relations with the home body are concerned, we have had no hint of our being considered insignificant. There is a regular exchange of communications, courteous and prompt replies to any request for advice and information as to matters current, nay more, unsolicited suggestion and counsel are at times most kindly offered to us, and there is gratifying reason to believe that the parent body consider, and we think rightly so, that the work of this Branch will expand.

During the year your Council inaugurated the policy of organizing visits to important buildings in course of construction. Two such visits have taken place, viz., February 8th, Visit to Municipal Markets and Abattoirs, by kind invitation of our Past President, Mr. G. S. Burt Andrews, Town Engineer. April 19th, Visit to Chudleigh's New Business Premises, by kind invitation of the Architect, Mr. J. A. Moffat (Member).

Each visit was personally conducted by the gentleman responsible for the invitation, upwards of a hundred members of the profession were present on each occasion, and each occasion terminated in refreshments and speeches, conviviality and technicalities happily blending good fellowship and mutual instruction. It is impossible to estimate the value of such occasions, and our hearty thanks were accorded to the two members of our profession already named, and to the owners of the various buildings, the Municipal Council of Johannesburg, and Messrs. Chudleigh Bros., for their genial acquiescence and participation in our professional excursion.

A further visit had been arranged to the Town Hall building now in course of construction, and the date had been fixed by the Architects, Messrs. Hawke and McKinlay (to whose kindness we are indebted for the invitation), for October 18th. Unfortunately, later developments in construction have made that date inconvenient, and the visit has for the time being to stand over.

Our membership has slightly increased during the year, six gentlemen have been added to our roll, and three more have been recommended by us and will in the ordinary course be further added. Care is taken that those admitted shall be qualified gentlemen whose inclusion shall reflect only credit upon our Society.

After some correspondence with the home Society, your Council has decided to elect several members, who are resident outside of Johannesburg, as Honorary Corresponding Members of the Branch Council. The gentlemen so elected are Mr. Adolph G. Howard, Capetown ; Mr. W. J. McWilliam, Port Elizabeth ; Mr, F. J. Ing, Durban.

As a result of these elections several interesting reports on South African matters have been received and have no doubt been noticed by you in the columns of our home *Journal.*

The proposed rescissions, alterations and additions to the Articles of Association were considered by your Council during this year and returned, with comment, to the home Society.

The matter of the geographical province of this Society has been the subject of discussion with the home body, and your Council has suggested that all members South of the northern boundary of the Congo Free State, and of the southern boundary of British East Africa, shall be eligible for membership in the Branch.

As your President, my assistance has occasionally been asked in regard to architectural competitions. My experience has been such as to impress me with the high level of ability reached in these competitions. It is, no doubt, beyond the reasonable order of things that any award can give universal satisfaction. Apart from this, however, I have, when acting as Assessor, endeavoured to award the palm to highest merit. For Assessors there is a pitfall which tinges an award with the judge's sense of his own ineffable superiority !

From our Treasurer's statement, you will see that our financial position is sound, being within £2 of the financial position of a year ago.

STATEMENT OF ACCOUNTS FOR THE YEAR ENDED SEPTEMBER 30TH, 1913.

RECEIPTS.	£	*s.*	*d.*	EXPENDITURE.	£	*s.*	*d.*
By Balance, 1912	59	2	10	To General Organization Expenses, Conferences, Visits, etc.	27	2	7
,, Moiety of Subscriptions from Head Office ..	38	12	10	,, Postages, etc.	4	2	8
,, Membership Fees	8	9	0	,, Membership Fees	8	10	0
				,, Sundry Accounts for hire of Rooms, Professional Journals, Bank Charges, and Petty Cash ..	9	0	9
				,, Balance at Bank	57	8	8
	£106	4	8		£106	4	8

Examined and found correct,
(Signed) D. M. BURTON, } *Hon. Auditors,*
D. M. SINCLAIR, } *October* 18th, 1913.

G. W. NICOLAY, *Hon. Treasurer.*

Mr. Harris then spoke appreciatively of the work of the Committee. Mr. D. Ivor Lewis, the Honorary Secretary was at present away on a holiday in England, that, he trusted, would be of every possible benefit to him. Mr. S. C. Dowsett had stepped into the breach, not for the first time, as acting Honorary Secretary, and no little credit was due to that gentleman for his work in that capacity. Mr. Stott, Honorary Corresponding Secretary, at Maritzburg, had very satisfactorily carried out his duties during the year ; and, as already mentioned, the new corresponding members of Council had performed quite an amount of work in the Society's interests. Mr. Beardwood, Past President, had put in a year as Member of the Council, and had excellently and regularly attended to his duties. It was a matter of regret that Mr. Waugh, Past President, who had served them for so many years in various capacities, had not seen his way to accept nomination for a further year of office on the Council. To-day, they regarded Mr. Waugh as the father of the Branch, and he (the speaker) trusted that the spirit which had characterized Mr. Waugh's labours in the early organization of this branch would always be with them, to characterize their own work and that of their successors. Two comparatively new members, Messrs. Sinclair and Burton, had kindly performed the duty of auditing the annual accounts. Lastly, and he thought most importantly, he could refer to their Honorary Treasurer, Mr. Nicolay, who had now added one more to his years of good service, and whose nomination to that Chair they had unanimously accepted. He (the speaker) would relinquish the Presidential Chair to Mr. Nicolay with confidence and every good wish, and the promise of their loyal support.

The report was received with applause, and a hearty vote of thanks was accorded with acclamation to the retiring President for his valued services during the past year.

The President announced that as no other nomination had been received, he had pleasure in declaring Mr. G. W. Nicolay unanimously elected President of the Branch for the ensuing year, and on taking the Chair, Mr. Nicolay thanked the meeting for the honour conferred on him.

He then declared the following Officers duly elected :—*Vice-President*, Mr. C. H. Stott ; *Honorary Treasurer*, Mr. S. C. Dowsett ; *Honorary Secretary*, Mr. D. Ivor Lewis ; *Committee*, Mr. J. F. Beardwood and Mr. D. M. Burton, with Mr. M. J. Harris, *ex-officio*. Messrs. Veale and Sinclair were elected *Honorary Auditors*.

The President then addressed the meeting, remarking that an occasion such as the present seems to happen opportunely when the particulars of an occurrence of special interest to the profession at large, as well as to our Society, have just been made known, and I feel that a reference to the Competition for the proposed new Government House at Rondebosch, Cape Town, is very apropos.

You are aware that the Society has, until lately, taken but little public notice of competitions in South Africa (holding that the Institute or the Association was in a better position to guide the profession in such matters) but that for good reasons that policy has been abandoned.

In consequence of this change, the Society supported the movement, which I believe originated in the Cape, to have the design for Government House thrown open to public competition. This movement was successful, and the result is known to you all, and because that result appears to me (though I did not compete), and to many others, very unsatisfactory, I would draw to it your serious attention with a view possibly, to some future action which may assist to put the conduct of Architects' competitions on a more satisfactory and surer base than at present they rest upon.

First then, the competitors are said not to have solved the problem put before the competitors, but it is now acknowledged that the conditions were not framed with a view to assisting them to solve it, and it is without question desirable that in a competition whatever its nature, and surely in a case presenting admitted difficulties, every available assistance should be given by the promotors to the competitors that would tend to a successful issue.

The difficulty in this competition was considerable, and could have been in a great measure removed if the assessors when they prepared the conditions had given the information brought forward in their report, and which they actually suggest should be embodied in the conditions for a supplementary competition, instead of keeping it (so to speak) up their sleeve.

The competition was burdened somewhat unnecessarily with the design for laying out the grounds, but as that is an unusual accompaniment it would have been reasonable—even sensible—to have stated what the advantages of the site were.

After further criticism on the instructions, Mr. Nicolay said, there is much more in the report that is open to legitimate criticism from a professional point of view, but it would be as tedious as it seems unnecessary to go through the report clause by clause.

The competitors are dismissed ungraciously as incompetent, the assessors recognizing that their faults are not " perhaps " due " in all cases " to absence of ability. Consequently the assessors suggest that the premiums should be withheld or tampered with, a suggestion which is not likely to appeal to Government, for it is almost certain that as no latitude in this respect is given the assessors, the premiums could be recovered at law.

The clause enforcing strictly the conditions of the Competition binds all parties, and no latitude is apparently given, the assessors as to whether there should be three, six or no premium at all. The assessors are given discretion as to whether they will exclude from the competition " any designs which do not comply with these conditions, or which in their opinion could not be carried out satisfactorily for the stated sum of £60,000." They have exercised their discretion by excluding none, though probably some of the designs do not satisfy either condition.

Whether this discretion is intended to be withdrawn or modified in the minatory clause which orders that a design under certain circumstances " will be excluded from the competition and returned to the author," is uncertain, as it is difficult to tell whether the fault is intended to refer to the full tally of drawings specified, or to the conditions. Perhaps, this is only a flourish of the rod to warn those who might offend for want of due carefulness.

The suggestion that another competition duly furnished with the assistance of a more enlightening set of conditions should be the means of putting things to rights is at least remarkable, for if there is time for that, three or four months could have been given the competitors with ease, and it is already clear that further information which was withheld might have brought out a satisfactory design by one of the present competitors and waste of time and money saved.

In case it may have escaped your notice, I call attention to an article which appeared in a local paper supporting the award in a manner almost inspired. It lectures the competitors with serious words having it seems a tone of ridicule, in perusal of which the reader might picture to himself a row of little boys being reproved by their teacher, who tells them they will have no marks for swatting up Cæsar when they should be learning the rule of three. Such trivialities, as well as the sneer at the profession they imply, may be indulgently (even with complacent amusement) overlooked, but it is fair and right to note them.

Following the President's address, a discussion ensued, and ultimately it was resolved :—

> "That a Special General Meeting of the Branch be held to consider the Assessors' "report on the Competition for the Governor-General's residence, and to pass such "resolutions as may be deemed necessary."

Votes of thanks were accorded to the Honorary Treasurer, and Honorary Auditors, the retiring Council, and the acting Honorary Secretary, and a special vote of thanks was ordered to be forwarded to the Honorary Secretary, Mr. D. Ivor Lewis, at present in Europe.

The following resolution was passed at a Special General Meeting of the South African Branch of the Society, held on the 27th instant :—

> "This Special General Meeting of The Society of Architects (S. A. Branch) disagrees "with the report of the Assessors on the competitive designs for the proposed new "Governor-General's residence at Cape Town. This Society considers this is but one "of several recent unsatisfactory incidents in the obtaining of designs for Govern-"ment Buildings, and resolves to ask the Minister of Public Works to receive in "interview a deputation on the whole question from the various Institutes of "Architects in South Africa."

Messrs. G. W. Nicolay (President), M. J. Harris and J. A. Moffat, were appointed Delegates of the Branch, to act with delegates from other Institutes in interviewing the Minister of Public Works.

The Society of Architects Lodge of Freemasons.

The Installation Meeting held on November 12th, at the Holborn Restaurant, proved to be a record in several respects. The esteem in which the outgoing Worshipful Master, Mr. E. J. Sadgrove, is held, was shown by the presentation to him by the Lodge of a Past Master Jewel, while the incoming Master, Mr. A. G. Ware, of Bournemouth, was installed in the presence of the most representative gathering which has ever assembled under the auspices of the Lodge.

The Master, Wardens and Representative Brethren from many Lodges in London and the Provinces attended, the Provinces of Hampshire and Dorsetshire, with which Mr. A. G. Ware is particularly identified sending delegates from Unity, 132, Ringwood; Amity, 137, Poole; Hengist, 195, Bournemouth; New Forest, 319, Lymington; Unity, 386, Wareham; De Moolham, 1146, Swanage; Boscombe, 2158, Boscombe; Horsa, 2208, Bournemouth; St. Aldhelms, 2559, Branksome; Powney, 3099, Lymington; Rowena, 3180, Bournemouth; Dorset Masters, 3366, Dorchester; St. Michæls, 3521, Bournemouth; and Blackmore Vale, 3625, Sturminster Newton.

The London Lodges represented included Hiram 2416, Guardian 2625, Rostrum 3037, and London Dorset 3221.

Amongst those who assisted the outgoing Master in installing his successor were Col. Sir William Watts, K.C.B., the Deputy Provincial Grand Master of Dorset, Mr. W. J. Parsons, Past Provincial G.S.D., of the same province, and Col. W. F. Thomas, P.G.D.C., Madras.

About a hundred of the members and visitors stayed for the Banquet, amongst the guests being a large number of members of Grand Lodge and of Provincial Grand Lodges. The response to the toast of "The Masonic Charities," which was proposed by Mr. P. Colville Smith, the Secretary of the "Old People," took the form of a collection on behalf of that Institution, which together with promises received will enable the Master to take up a very substantial contribution as a Steward of the Festival, next February, on behalf of the Lodge.

An excellent Musical Entertainment organized by Mr. Harry E. Warner added much to the pleasure of the evening. A very excellent entertainment was provided by Miss Elsie Warner, Mr. Edward Holland, Mr. J. Goddard, and Mr. Arthur Dancey.

The extraordinary success of the gathering must be attributed to the initiative and organizing ability of Mr. A. G. Ware, and to the evident wish of his many friends to do him the utmost honour in their power, by coming from near and far to personally testify to that desire.

Council Dinner to Mr. D. Ivor Lewis.

A very pleasant gathering was held at Frascati's Restaurant, on October 30th, when the Members of the Council of The Society of Architects entertained at Dinner the Honorary Secretary of the South African Branch, Mr. D. Ivor Lewis, who is at present on leave at home. There was a very happy absence of formality in the proceedings, the main object being to express through the person of Mr. Lewis the Council's appreciation of the work being carried on by the Branch, and to enable the Council to grasp more clearly the position of architectural matters in South Africa, particularly in regard to Registration. This they were enabled to do by the very lucid way in which Mr. Lewis in a few words dealt with the situation, and gave his experience of the working of the Act in the Transvaal, and the proposals for its amendment and extension to the Union of South Africa.

Modern Indian Architecture.

There would appear to be three outstanding facts concerning modern Indian architecture. One is that a purely Western treatment is out of place in the country; another that the designer trained in Western schools is unable to blend the methods of the West with those of the East; and next that long study of Eastern work is necessary before successful designing in it is possible. These are considerations that must be weighed if there is any intention of opening schools of architecture in the country, an idea which seems at last to be dawning upon the authorities. To send lads from India to learn the profession in Europe or America can be justified only upon the ground that institutions did not exist here; but this is a policy which we trust is going to be changed, just as it has been decided to open a technological institute in Calcutta upon its being pointed out by employers of labour that a training in the country itself produced a more useful type of man. In the matter of architecture Government has made a small beginning by offering three State scholarships of Rs. 100 a month to students going to the Bombay School of Arts for a training in this branch of art. This is good as far as it goes, but we would like to point out that there is no provision for teaching this subject in the technological institute schemed for Calcutta. The fact is it has not been sufficiently grasped yet that the field for architectural work in India promises to become enormous, and that time should not be lost in providing the men who will keep it from sinking further into the corrupt forms that have marked the era beginning with British rule. To continue trying to control it from schools in Western countries is to prevent it from rising to the heights of an indigenous art, a dignity to which it can attain only by being studied in the country.—*Indian Engineering.*

The Artificial Lighting of Architectural Features.

CAN THE "REVERSAL OF SHADOW" BE JUSTIFIED?

In a paper read before the Illuminating Engineering Society, Messrs. J. S. Dow and V. H. Mackinney demonstrated by means of photographs some interesting points in connection with the important part played by shadows in problems of artificial lighting.

The front of White's Club in St. James's Street, as seen by artificial light on Coronation night, was an instance of the value of oblique rays in showing up mouldings. The artificial lighting of the face of the building was in this case obtained from two lines of concealed tubular lamps in trough reflectors, which were specially shaped to give an even illumination. In this case the mouldings stand out in much stronger relief and are much more noticeable by night than by day. Some authorities seem to dislike the use of oblique lighting to show off surface ornaments of this kind, arguing that the effect produced is quite distinct from that characteristic of daylight, and therefore unnatural. This is doubtless a matter of taste but there would seem to be no inherent objection to the method if the general impression is pleasing; it may be added that many of the most striking effects in the case of buildings seen by daylight are those produced by the inclined rays and lengthened shadows caused by the setting sun.

A NEW ASPECT OF ARTIFICIAL LIGHTING.

Day and night views of premises in Cockspur Street were shown as an example of the "reversal of shadow" by artificial light. In the view taken by daylight the pillars stand out white against a dark background, while with the artificial light an exactly opposite effect is obtained due to the lamps concealed behind the pillars. The arch on the right shows a similar effect, the interior being brighter than the front surface during the day but darker by night. Some writers assert that these shadow reversals are unnatural and should be avoided, but it must be conceded that the concealed lights have a charming effect and it might be urged that the artificial lighting of architectural features is a new field. Is it necessary for the effects characteristic of daylight to be imitated? Seeing that artificial lighting is itself radically different from daylight in its distribution and arrangement it seems unreasonable to try and force it always to give the same kind of shadows.

Some of these architectural points are also worthy of special discussion. Indeed the more one examines and considers these matters the more one is struck by the important part played by shadow in almost all problems of artificial lighting.

Qualifying Examination for Membership and Graduateship.

Result of the October Examinations.

The following certificates have been gained in the recent examinations held in London, Dublin, and Cardiff :—

Membership Pass Certificates.

FRANCIS CLEMES, Great Coates, near Grimsby; SAMUEL HERBERT COLLINS, 28, Great Elms Road, Bromley; DELAMARK FRANK INGLETON, 41, Machen Place, Cardiff; WILFRID EDWIN KELLY, 138, Herne Hill Road, S.E.; ROBERT HENRY BALL, 29, Dafforne Road, Upper Tooting, S.W.; DONALD HENRY BUTT, Springfield, Stonehouse, Gloucester; JAMES DOUGLAS HUNTER, 39, Great Marlborough Street, W.; GORDON WALLETT JACKSON, Seaton, Talbot Hill, Bournemouth; TREVELLYN PHILIP JENKINS, 4, Goat Street, Swansea; FRANCIS PETER RUSSELL, 7, Nottingham Street, Dublin; WILFRED EBERHARDT SCHUMM, The Lindens, Linthorpe, Middlesbrough; WILLIAM JOSEPH PRICE, Vernon House, Sicilian Avenue, Bloomsbury Square, W.C.

Sectional Certificates.

SECTION III. PRACTICE. (Contracts, Specifications, Quantities and Prices.)

WILLIAM HENRY ADAMS, Council House, Romford, Essex.
SAMUEL JOHN CLAUDE DENING, 29, Gloster Road, Barnstaple, Devon.
WYNDAM MORGAN RANDALL, 54, Park Street, Bridgend, Glam.

SECTION IV. SANITATION. (House Drainage and Sewage Disposal.)

WILLIAM HENRY ADAMS, Council House, Romford, Essex.

Graduateship Pass Certificates.

RICHARD DANIEL COLDHAM, 88, Palmers Road, Southgate, N.
SYDNEY RICHARD SMITH, 145, High Road, Streatham, S.W.

Examinations, 1914.

The Graduateship and Membership Examinations during 1914 will be held in the first week in April, and the first week in October. The Examinations are compulsory for Students over twenty-five years of age who wish to remain on the Register. A copy of the syllabus may be obtained from the Secretary.

The Society of Architects' Travelling Studentship.

Regulations and Conditions, 1914.

This Competition is limited to Graduates and Students of the Society, who have paid their subscriptions for the current year. The Assessors are Mr. Edward J. Partridge, F.S.I., Mr. A. Alban H. Scott, M.R.SAN.I., and Mr. Thos. Wallis.

Each drawing must have endorsed thereon the following heading: "The Society of Architects' Travelling Studentship Competition, 1914."

The drawings must be executed on white paper (Imperial), be mounted on strainers or boards and bear no motto or distinguishing device.

The drawings, etc., must be delivered, carriage paid, at the Society's Offices, 28. Bedford Square, London, W.C., not later than 6 p.m. on the first day of May, 1914, without name, motto, or mark of identification, and must have attached to one of the drawings a sealed envelope containing the competitor's signature and postal address appended to a declaration that the drawings are the candidate's unaided work. The envelope and declaration form must be obtained from the Secretary.

The drawings will be numbered in order of their receipt, and a corresponding number will be placed on the envelope, which will not be opened until after the award has been made. Reasonable care will be taken of drawings or documents received in this competition, but the Council will not be responsible for loss or damage in connection therewith.

The Studentship is of the value of Twenty-five Pounds (£25), and carries with it the Silver Medal of the Society. The holder will be required to undertake, between June 1st and October 1st, 1914, an architectural sketching tour of not less than three weeks' duration, and must, within fourteen days after the award, notify the Secretary of the date of the commencement of the tour and its proposed locality. He will then receive an instalment of Fifteen Pounds (£15), and subject to the Council being satisfied with the work executed during the tour, the balance of Ten Pounds (£10) will be paid, and the Silver Medal presented to the candidate at the first Ordinary Meeting of the Session, or some other date to be fixed by the Council.

A diary of the tour must be submitted with the measured drawings, sketches and notes, all of which must be deposited with the Society before October 1st, 1914.

The Council reserve the right of withholding or varying the award for any reason deemed by them to be sufficient, and of exhibiting or reproducing the drawings, and their decision on any matter arising is to be final. The Studentship may only be held once by the same person.

A candidate who does not adhere to the conditions and instructions in every particular, will be disqualified.

Subject for 1914.

A COMPLETE DAIRY FARM SUITABLE FOR ABOUT FIFTY MILKING COWS.

The accommodations must include the following :—

House suitable for dairy farmer, containing five bedrooms, two reception rooms and an office, together with bathroom, kitchen and other usual accommodation.

Two cottages, each containing three bedrooms, bathroom, large kitchen and living room combined, one fair-sized scullery, together with the usual offices.

One building suitable for the housing of six single men, containing separate cubicles for each, one common sitting room, one common dining room, together with the necessary attached kitchen and other offices.

One building with the following accommodation : Two attached open barns suitable for the housing of twenty-eight cows each during rough weather, one milking room for fifty cows ; three isolation stalls and one separate room for isolation, about 12 ft. 0 in. by 12 ft. 0 in. ; calf pen about 20 ft. 0 in. by 12 ft. 0 in. ; two bull pens about 10 ft. 0 in. by 12 ft. 0 in. ; necessary provision for forage, etc. Attached to this block of buildings there should also be a dressing room and lavatories for the employees.

A detached building should be provided containing at least the following rooms :–

Milk receiving room ; washing room ; sterilizing room ; bottling room ; creamery ; room for butter making ; boiler house for steam supply, together with provision for fuel storage.

In a detached building provision should also be made for proper and efficient housing of three horses, together with coach house and a garage for the housing of a small motor van. The position of implement sheds should be indicated on the block plan.

The water supply is to be by an Artesian Well, and there must be facilities for water storage.

The estimated total cost, and method of arriving at it, with the price per cubic foot must be shown on one of the drawings. The floor area of each building should also be given.

The main run of the drains must be shown and also the provision to be made for treating the sewage before the effluent discharges into the brook.

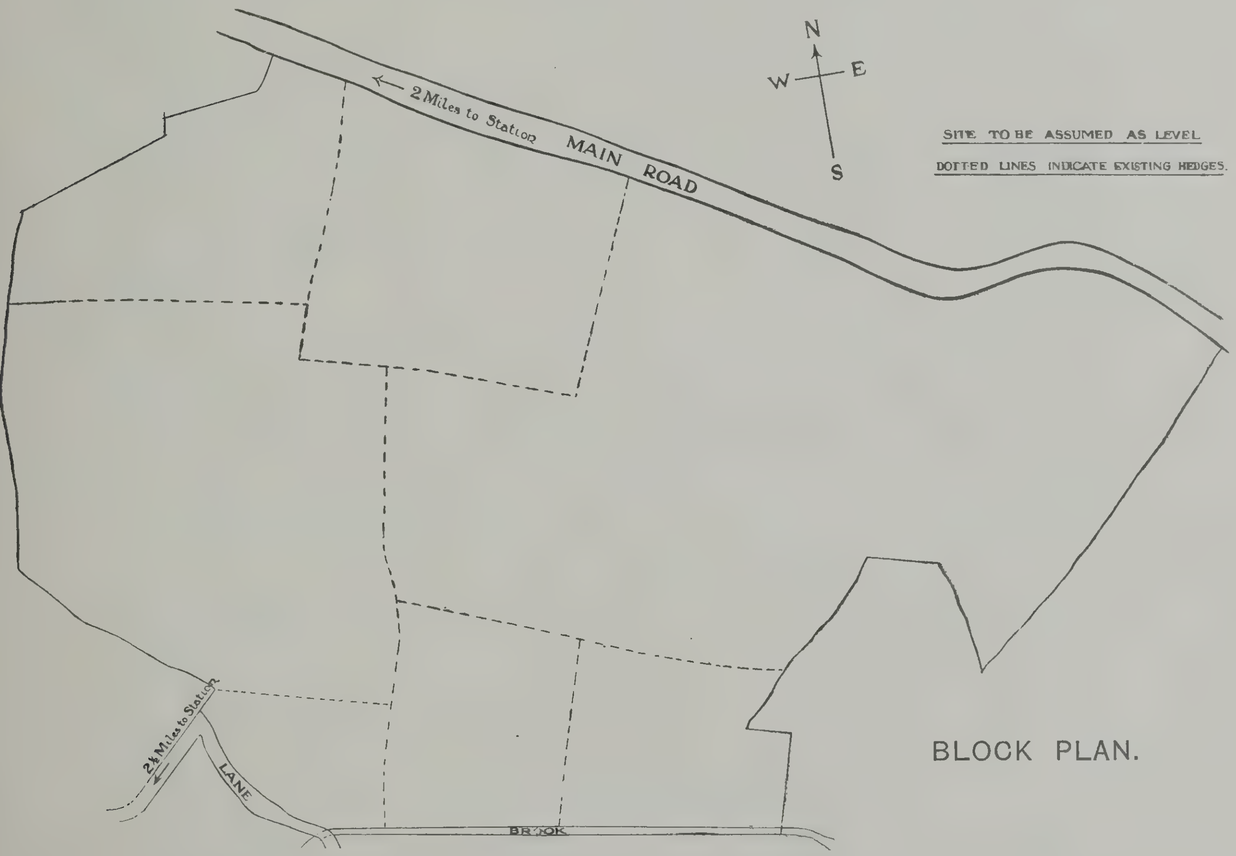
Drawings Required.

All drawings are to be executed to a scale of 8 ft. 0 in. to an inch, except where otherwise specified.

The following plans are required :—

Plans of each floor ; one section and one elevation of each domestic building ; two sections and four elevations of all other buildings ; two sheets of details ½ in. to a foot, of any portion of the building and fittings, except the domestic buildings, and a block plan to a scale of 25 ft. to an inch.

Notice to Competitors.—In adjudicating on the designs submitted, special attention will be paid to the planning and design, suitability of the accommodation provided, the limit of cost, material and construction, draughtsmanship and general finish of the drawings and to strict adherence to these conditions.



Scale 75 feet to 1 inch. *To be enlarged two-thirds to 25 feet to 1 inch.*

The President's Prize.

The President, Mr. Percy B. Tubbs, F.R.I.B.A., offers a prize of the value of £5 5*s*., for the best design submitted by a Graduate or Student of the Society in the following subject :—

The internal architectural decorations of a Ball Room situated on the First Floor of a Royal Palace.

The Ball Room is to be at least 100 ft. by 50 ft., exclusive of a raised dais gallery for the musicians, and of any recesses, etc., that the competitor may desire for his scheme.

There should be two fireplaces in the room. The height of the room and the lighting is left to the discretion of the competitor.

The drawings required are :—a plan, drawn to ⅛ in. scale ; showing the Ball Room, Ante-rooms, Retiring Rooms, approaches and main staircases, etc. An elevation of each of the four sides of the room, with sections through walls and ceiling drawn to ¼ in. scale. A half plan of the ceiling looking up, and also details of one chimney-piece and part of adjoining wall, drawn to ½ in. scale.

The method of mounting the drawings and presenting the scheme is left to the discretion of the competitor.

A perspective drawing of a portion of the room is optional.

Each drawing must have the following heading endorsed thereon : " The Society of Architects President's Prize, 1914," and all drawings must be delivered carriage paid at the Society's Offices, 28, Bedford Square, London, W.C., not later than May 1st, 1914, without any mark of identification. They must be accompanied by a plain sealed envelope containing the competitor's name and address, appended to a declaration that the drawings are the competitor's unaided work.

The President and the Vice-Presidents will be the Jury, and their decision will be final and binding on any point which may arise.

Library Catalogue.

A new Catalogue of the Loan Library is in the press, and will be distributed to Members, Graduates and Students in due course.

The Architectural Scholarship, 1914.

Regulations and Conditions.

The Scholarship is awarded for Measured Drawings, and Competition is confined to Graduates and Students of the Society, who have paid their fees for the current year. The Assessors are Messrs. E. C. P. Monson, F.R.I.B.A., Vice-President, R. Goulburn Lovell, A.R.I.B.A., Vice-President, and Edwin J. Sadgrove, F.R.I.B.A.

Candidates are required to submit at least three and not more than four sheets of Measured Drawings and Details, of some building of historic interest.

The Drawings are to be prepared between November 1st, 1913, and September 30th, 1914, and are to be executed on white paper, imperial size, mounted on strainers or boards and bear no motto or distinguishing device. Each drawing must have endorsed thereon the following heading, " The Society of Architects' Architectural Scholarship, 1914," and must be delivered carriage paid at the Society's Offices, 28, Bedford Square, London, W.C., on or before September 30th, 1914, together with the original sketches and notes.

The Drawings must have attached thereto a plain sealed envelope containing the Competitor's signature and address appended to a declaration that the Drawings, etc., are the candidate's unaided work.

The Scholarship is of the value of £10, and will be disbursed by the Council on behalf of the holder.

The award will be made by the Council for the best work of sufficient merit subject to their approval of the manner in which the Candidate proposes to utilize the Scholarship, or alternatively to the Candidate agreeing to such scheme as the Council may decide upon. The Council reserve the right to withhold or vary the award, and to exhibit or reproduce the drawings, and their decision on any matter arising, is to be final.

Should the scheme not call for the payment of so much as Ten Pounds (£10) the holder may receive the value of the balance in books or instruments.

The successful Candidate may be required, before the award is confirmed, to produce to the Council evidence as to age.

The Drawings will be numbered as received, and a corresponding number placed on the envelope, which will not be opened until after the award has been made.

The Council will not be responsible for any loss or damage that may occur to any drawing or document, though every reasonable care will be taken.

The Scholarship may only be held once by the same person.

A Candidate who does not adhere to the conditions in every particular, will be disqualified.

Quarterly Competitions.

Regulations and Conditions.

The Competitions are limited to Students under 23 years of age on the day the respective competition closes, and who have paid their subscriptions for the current year. Assessors are appointed by the Council for each competition.

The drawings, or essays, etc., are to be prepared between November 1st, 1913 and October 31st, 1914; and must be executed on white paper, imperial size and mounted, and delivered carriage paid, at the Society's Offices, 28, Bedford Square, London, W.C., not later than 6 p.m. on the respective quarter days (viz., January 31st, April 30th, July 31st and October 31st), without name, motto, or mark of identification. They must be accompanied by a plain sealed envelope containing the competitor's signature and address appended to a declaration that the drawings, or essay, etc. are the candidate's unaided work, and that they have been executed within the time allotted, for the purpose of the competition.

The prize in each competition is of the value of £3 3*s*., with a second prize of the value of £2 2*s*., if more than ten Students compete. The Council reserve the right to vary or withhold the award which will only be made if the work is of sufficient merit, and subject to their approval of the manner in which the candidate proposes to utilize the amounts which will be disbursed by the Council on behalf of the successful competitor. The successful competitor may be required, before the award is confirmed, to produce to the Council evidence as to age.

The plans, etc., will be numbered as received, and a corresponding number will be placed on the envelope, which will not be opened until after the award has been made.

The Council will not be responsible for any loss or damage that may occur to any drawing or document submitted in connection with these competitions though every reasonable care will be taken of the same.

The Council reserve the right of exhibiting or reproducing the drawings, essay, etc., and their decision on any matter arising is to be final.

A candidate who does not adhere to the conditions and instructions in every particular, will be disqualified.

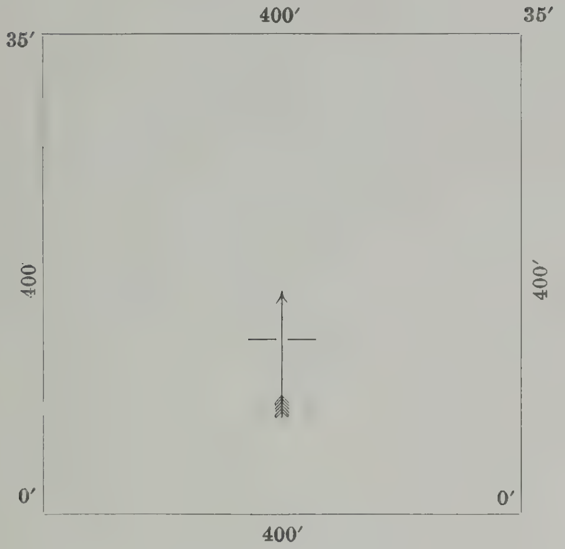
Quarter Ending January 31st, 1914.

Assessors: MESSRS. PERCY B. TUBBS, F.R.I.B.A.; GEO. E. BOND, J.P.;
and EDWARD J. PARTRIDGE, F.S.I.

A SMALL SANATORIUM FOR TWENTY-FOUR CONSUMPTIVE PATIENTS, TWELVE OF EACH SEX.

The Scheme is to be a practical one, and self-contained. It must comply with the recognized essential conditions for the successful working of such an

Sketch Site Plan.



Roadway 40′ wide.

establishment. The buildings are to be of a permanent character, arranged upon strictly economical lines.

The site as shown on plan is fenced in, but the competitor must show the entrance gates, and the general layout. It has a frontage to a made-up public road, containing sewers, water, gas and electric mains. The ground has a gentle slope up to 35 feet above the road at the north boundary.

Accommodation Required.

Two Pavilions, each to contain six rooms, with two beds in each, the necessary verandahs, a duty room for the nurse, with the bath rooms fitted with lavatory basins, slop closet, and two w.c.'s.

Administration Block. Large common dining room, matron's sitting room, consulting room (which may be used as a Committee room), waiting room, small drug store, kitchen, scullery, larder and usual offices : and on first floor a bedroom each for the matron and four nurses, three servants' bedrooms with two beds in each, box room, linen and blanket stores, two bathrooms, two w.c.'s., etc.

Laundry, Etc. An isolated laundry, and a store and disinfecting chamber for patients' clothing must be provided. Provision must be made for adequate heating, and for a steam supply for cleaning spatum pans, etc.

Drawings Required.

A Block plan to a scale of 16 feet to the inch showing the position of buildings and general layout, connecting corridors, and drains with their sizes, falls and depths manholes, inspection pits, etc.

A complete set of working drawings to a scale of 8 feet to the inch comprising plans (only one portion need be completed, the other may be shown in outline, except the necessary deviation in sanitary arrangements). Elevations, one sectional elevation through pavilions and one section through the administration block, also a front elevation of at least one of the patients' bedrooms, and section through same and balcony, both to 1½ in. scale.

Note.—Uninterrupted sunlight to the pavilions is an absolute necessity.

Quarter ending April 30th, 1914.

AN ESSAY ON "THE RISE AND DEVELOPMENT OF NORMAN ARCHITECTURE." Illustrated by freehand sketches.

Assessors : PROF. HENRY ADAMS, M.INST.C.E.; MESSRS. GILBERT A. HARRISON; and HARRY GILL.

Essays must be written in the third person, on one side of the paper only.

The papers, which should preferably be typewritten, must be delivered at the Society's Offices, not later than 6 p.m., on Thursday, April 30th, 1914.

For general conditions, see page 135.

Quarter ending July 31st, 1914.

Assessors : COL. F. S. LESLIE, R.E.; and MR. G. A. T. MIDDLETON, A.R.I.B.A.

The subject for this competition will be "ARCHITECTURAL SKETCHES" made between November 1st, 1913 and July 31st, 1914. They must be the unaided work of the candidate, and sketches executed at any of the Students' Sketching parties held between the dates mentioned will be admitted to competition.

The Sketches, which must be unidentified, must be delivered at the Society's Offices, not later than 6 p.m., on Friday, July 31st, 1914.

For general conditions, see page 135.

Quarter ending October 31st, 1914.

Assessors : COL. F. S. LESLIE, R.E.; and MR. G. A. T. MIDDLETON, A.R.I.B.A.

Candidates are required to submit at least one sheet of MEASURED DRAWINGS to one-eighth scale, one sheet to half-inch scale, and one sheet of enlarged details.

The Drawings are to be prepared in accordance with the general conditions set out on page 135, and must be delivered carriage paid at the Society's Offices, not later than 6 p.m., on Saturday, October 31st, 1914, together with the original sketches and notes.

Mainly about Members.

A new Infants' School has been erected in New Road, Brentwood, to provide accommodation for 220 children. The plans were prepared by MR. A. T. G. WOOD, architect.

The plans of MR. F. HOWARTH, have been adopted for the new Day and Sunday Schools, which are to be erected in Ribbleton Avenue, Preston. The estimated cost of the work is £4,000.

Extensive alterations and additions are being made for the Duchess of Sutherland to a mansion at Roehampton. MR. F. S. CHESTERTON, 150, Cheapside, E.C., who designed the original building, is the architect.

MR. R. L. ROBERTS, of Abercarn, is the architect of a new Institute at Cwmfelinfach, which has been erected at a cost of £11,000. The building provides a swimming bath, reading room, library, billiard rooms, and offices.

A large block of schools has been erected at Peasedown St. John, Wilts, from the designs of MR. W. F. BIRD, architect. The schools stand on a site on the main road from Bath to Radstock, and will accommodate 650 children.

The Committee of the National Reserve, London Division, Kensington Battalion, have appointed MR. C. LE R. TUDOR, of Cambridge Gardens, W., as their architect for the alterations to the premises in Ladbroke Grove, W., recently acquired by them.

Clare Town Hall, Suffolk, has been erected in commemoration of the Coronation of King George V., and was designed by MR. P. M. BEAUMONT, architect, of Maldon. The hall has seating accommodation for 300 people, and other rooms are provided for various meetings of the Council. The estimated cost of the work was £1,317.

MR. JOHN TODD, Hamilton House, Bishopsgate, has been returned unopposed as a member of the City of London Board of Guardians to fill the vacancy caused by the death of the late Vice-Chairman of the Board, Mr. Walter Bates. Mr. Todd has been an active member of the Bishopsgate Ward Club, and with his long practical experience as a district surveyor he will be able to render very useful service at Bartholomew Close, especially where buildings are concerned.

Penscot, Shipham, Somerset, which was formerly an inn, is to be enlarged to serve as a Guest House in connection with the National Council of Adult School Unions, by the addition of a large dining-hall, dormitory and bedrooms, bathrooms and offices, to afford accommodation for thirty visitors. The new work is to be carried out in harmony with the old, with walls of local stone, cream-washed, roof of pantiles, wood casements and other joinery finished white. The architect for the work is MR. HAROLD F. TREW, of County Chambers, Gloucester.

Meetings and other Fixtures, 1913-14.

Date.		Time.	Occasion.
Dec.	11th.	4 p.m.	Committees and Council.
,,	,,	8 ,,	Members' Meeting. Paper on "Colour," by Mr. R. Goulburn Lovell, A.R.I.B.A., Vice-President.
,,	17th.	6 ,,	Students' Social.
Jan.	1st.	4 ,,	Committees.
,,	14th.	5 ,,	Masonic Lodge, Holborn Restaurant.
,,	15th.	4 ,,	Committees and Council.
,,	,,	8 ,,	Members' Meeting. Annual Report and Balance Sheet.
,,	29th.	4 ,,	Committees.
,,	31st.	6 ,,	Last day for depositing Quarterly Competition Drawings.
Feb.	12th.	4 ,,	Committees and Council.
,,	,,	8 ,,	Members' Meeting. Paper on "Buildings for Small Holdings," by Mr. A. A. Hunt (Member).
,,	25th.		Examination Entries Close.
,,	26th.	4 ,,	Committees.
March	11th.	5 ,,	Masonic Lodge, Holborn Restaurant.
,,	12th.	4 ,,	Committees and Council.
,,	,,	8 ,,	Members' Meeting. Paper on "Bricks and Brickmaking," by Mr. A. E. Brown, B.Sc., London.
,,	26th.	4 ,,	Committees.
,,	31st.	10 a.m.	Graduateship and Membership Examinations.
,,	10th to 14th.		Easter Vacation.
April	16th.	4 p.m.	Committees and Council.
,,	,,	8 ,,	Members' Meeting. Paper on "The Arbitration Clause," by Mr. Valentine Ball, Barrister-at-Law.
,,	30th.	4 ,,	Committees.
,,	,,	6 ,,	Last day for depositing Quarterly Competition Drawings.
May	1st.	6 ,,	Last day for depositing Travelling Studentship and President's Prize Drawings.
,,	14th.	,, ,,	Committees and Council.
,,	,,	8 ,,	Members' Meeting. Subject to be announced.
,,	30th.		Last day of depositing Scholarship Drawings.
,,	,, to June 2nd.		Whitsuntide Vacation.
July	31st.	6 p.m.	Last day for depositing Quarterly Competition Drawings.

OCT.	1st.	4 p.m.	Council Meeting to receive Nominations for House List.
,,	15th.	4 ,,	Committees and Council.
,,	,,	8 ,,	Members' Meeting. Presentation of Students' Prizes. End of Session.
,,	31st.	6 ,,	Last day for depositing Quarterly Competition Drawings.

Chamber Music Concert.

The Society's Hall was crowded on November 18th, when another delightful Concert was given under the direction of Mr. D. Noel Sheffield, Member of Council, who was assisted by Miss Elsie Spencer, L.R.A.M., Miss D. Ker, Mr. Percy H. J. Dover, Mr. J. R. Sutton, Mr. F. W. Sutton, A.R.C.O., and Mr. B. Culmer Page (Member).

The programme included pieces by Greig, Chopin, Mendelssohn, Schumann and Rheinberger, and songs by Herman Löhr and Herbert Oliver.

Mr. Percy H. J. Dover was recalled for his Pianoforte Solo, Scherzo in B Flat Minor, Op. 31, Chopin ; and Mr. B. Culmer Page for his Songs of the Devon Moors. That the Orchestra was not called upon to repeat their items was due to want of time and not to want of appreciation by the audience. Indeed, they paid the artistes the highest possible compliment, that of listening to them in perfect silence, though they could not be restrained from showing their approval in the manner usually observed at the conclusion of each item.

The Society is to be congratulated on the possession of so much musical talent amongst its members, and on their willingness and that of their friends to give the Society the benefit of it.

The President expressed exactly the feeling of those present when in thanking the artistes, he expressed the hope that these musical treats might be offered to the Society more frequently.

Students' Social.

The first of what is hoped will be a series of pleasant informal gatherings will be held in the Society's Library, on Wednesday, December 17th, 1913, at 6 p.m. All Graduates and Students of the Society are invited to co-operate in making a success of the scheme by being present. A piano will be available, smoking is allowed, light refreshments will be obtainable at a moderate charge. Conversation, books, music, and an atmosphere of smoke and friendliness, are some of the ingredients which lend themselves to the passing of a pleasant hour or two in congenial surroundings. Mr. N. G. Harland, who is making the arrangements will be glad if Graduates and Students will drop him a line at 28, Bedford Square.

Advertisements in the Journal.

Members are reminded that they can considerably enhance the value of the *Journal* as a source of revenue to the Society, by mentioning the publication in communicating with the firms whose advertisement appears therein. By doing so the members make the *Journal* known as a useful medium between the producer and the consumer.

Ordinary Meeting.

The Second Ordinary Meeting of The Society of Architects for the Session 1913-14, will be held at 28, Bedford Square, London, W.C., on Thursday, December 11th, at 8 p.m.

Agenda :—

1. Minutes.
2. Nominations and Announcements.
3. Paper by MR. R. GOULBURN LOVELL, A.R.I.B.A. (Vice-President), on "Courage in Colour."

Memberships Lapsed.

The following are no longer on the Registers of The Society of Architects, their connection with it having lapsed on October 31st, 1913 :—

Register of Members :—W. H. ALTON, R.E. Office, Imtarfa, Malta; F. S. ELGAR, Woodgrange Cottage, Harnham Hill, Salisbury; H. V. MILNES EMERSON, A.R.I.B.A., Belgravia Chambers, 74, Victoria Street, Westminster, S.W.; E. J. W. HIDER, The Outer Temple, 222, Strand, W.C.; W. D. JENKINS, A.R.I.B.A., George Street, Llandilo; J. R. MEWTON, 15, Victoria Street, Liverpool; T. G. PRICE, Union Chambers, Temple Row, Birmingham; D. A. ROSS, Craven House, Kingsway, W.C.; GEORGE WRIGHT, Council House, Walsall.

Register of Students :—T. D. O. BULKELEY, 134, New Bond Street, W.; J. W. CRAFT, 50, High Street, Lymington, Hants.; H. O. DIXON, The Firs, Coldred, Near Dover; J. E. FIRTH, 6, Albert Crescent, Lincoln; RALPH JACKSON, 31, Langherne Road, St. John's, Worcester; H. A. KEIGHLEY, 120, Deane Church Lane, Bolton, Lancs.; H. PEDDER, Mumbles, Blenheim Road, St. Albans; F. H. WHITE, 122, Hurst Street, Oxford; F. G. VINEY, 15, Grove Place, Penarth, Cardiff; A. WILLIAMSON, 75, Church Road, Northwich.

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The Society is not, as a body, responsible for the opinions expressed by individual authors and speakers.

"Hall Marked" or "All Marked."

The position of the R.I.B.A. at the moment appears to be that they are advised that the Parliamentary avenue to Registration is closed to them for the present, chiefly owing to grave constitutional disabilities which have arisen because of the introduction of the non-corporate class of Licentiates. It is now proposed to create a class of "Chartered Architects" to which Licentiates would be admitted *ipso facto*. The Associates, who have consistently opposed any alleged encroachment on their rights and privileges, and who were chiefly responsible for the "amalgamation" fiasco, extend their opposition to the present proposal also. The result is that the Institute are committed to a policy which they now find they have no power to carry out, and their proposal to endeavour to remove the disabilities and incidentally to extend their scope in other directions are of such a character as to call forth opposition from their corporate members.

Any attempt to "hall mark" one section of the profession is in our opinion doomed to failure. Architects must not only be "hall marked"; they must be "all marked." That is the only solution. It is no use so long as there is more than one Architectural body in existence to attempt to accomplish by charter within one Institution, that which, under the conditions referred to, can only be attained by Statute covering the whole profession.

The essential difference between the Registration proposal of the R.I.B.A. and that of the Society is that the former are pledged to a restricted policy of Registration within the Institute and the latter to a policy of Registration covering all bona fide members of the profession, whether they are members of any architectural body or not.

Proceedings.

The Second Ordinary Meeting of The Society of Architects for the session 1913-14, was held at 28, Bedford Square, London, W.C., on Thursday, December 11th, 1913, at 8 p.m.

Mr. R. Goulburn Lovell, A.R.I.B.A., Vice-President, having taken the Chair, it was resolved that the Minutes of the last Ordinary Meeting, as printed in the *Journal*, be confirmed and signed.

Five nominations for Membership were announced, and a ballot was taken for the election of the following Candidates for Membership, and was declared to be unanimously in their favour :—

Ball, Robert Henry,	29, Dafforne Road, Upper Tooting, S.W.
Butt, Donald Henry,	Springfield, Stonehouse, Gloucestershire.
Clemes, Francis,	Great Coates, nr. Grimsby, Lincolnshire.
Gladstone, John Bright,	61, High Street, Lockerbie, Dumfriesshire.
Heath, Francis,	Grove House, Warsop, Mansfield, Notts.
Ingleton, Delamark Frank,	Weedon House, 41, Machen Place, Cardiff.
Jenkins, Trevellyn Philip.	4, Goat Street, Swansea.
Kelly, Wilfrid Edwin,	138, Herne Hill Road, Herne Hill, S.E.
Schumm, Wilfred Eberhardt,	The Lindens, Linthorpe, Middlesbrough.

It was announced that the following Candidates had been admitted to the Register of Students by the Council :—

Cameron, Donald John,	121, Govan Road, Glasgow.
Crabb, Alfred Leonard,	Jubilee Hotel, Carmarthen, South Wales.
Lock, John Matthew Boys,	Speldhurst, Duke's Avenue, Church End, Finchley, N.

Mr. R. Goulburn Lovell then read a paper on "Courage in Colour." The following took part in the discussion which followed :—Messrs. S. Bylander, Frank E. Bishop, J. P. C. Chaures, Noel D. Sheffield, Col. F. S. Leslie, R. Geo. Bare, Richard Lee, Ellis Marsland, J. Herbert Pearson, A. H. Salisbury, Adrian Berrington, A. A. Atkins, A. Varley, and Mrs. Curtice.

A hearty vote of thanks was accorded to Mr. Lovell, who in his reply dealt with the points raised. The proceedings then terminated.

Twenty-ninth Annual Dinner.

The Annual Dinner will be held at the Hotel Cecil, on Tuesday, April 21st, 1914. Tickets, 7s. 6d. Further particulars will be announced in due course.

Courage in Colour.

By R. Goulburn Lovell, A.R.I.B.A., Vice-President.

IN these northern climes there is a shrinking from the dignity of pure colours, a fear that they may be termed gaudy; there is a general lack of courage in applying any colour to one's surroundings excepting tertiary tones and greys. Already, however, there are indications that the "colour sense" is awakening, and that the feeling for pure colour is growing. The movement is one which is likely to be accelerated year by year.

The main barriers to that movement are the want of accurate knowledge of colour combination and the lack of courage in their use, inducing restraint and limitation to drab greys and sombre shades.

The healthful influence of colours is of commanding importance. To appreciate bright colours is a sign of health and the gift to mankind of flowers is surely Nature's kindliest grace. How often will a little child go wild with joy at the sight of brilliant flowers! and who shall measure the influence of colour in shaping the faculties of the rising generation at the time of life when the mind is most receptive.

A knowledge of the theory of colour will place a much-needed tool in the hands of the architect, the designer and the decorator.

It may be difficult to believe that only three colours, red, blue, and yellow, are employed to obtain all the variety of tones and colours on these charts, including even the black patch in the centres.* Chart Ia is intended to make clear the composition of colours. Chart IIa is a chromatic circle showing the gradations of twelve pure colours, and Chart IIIa is a chromatic circle of the same twelve colours, only that they are broken with black or white.

Definition of Colour Terms in Practice.

Very often confusion arises through the careless or vague application of terms in describing colour and its qualities. It may be advisable here to explain briefly the theory of colour-production and to make clear the exact meaning of the terms employed in dealing with the subject.

A Spectrum shows the component parts of a ray of light separated from one another so that each part or colour may be seen separately. A common glass prism held to the light will produce a spectrum of colours. The spectrum most seen in nature is that of the rainbow, where the rays of light are separated from one another by the dispersion of the light in drops of water. In the rainbow or glass prism each colour may be seen separately, although they merge together by indeterminate gradations in the following manner: From reds to oranges, to yellows, to greens, to

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*[Note.—It has been found impracticable to reproduce the colour charts referred to. They are to be found in the author's book on *Home Interiors*, on which the paper is based.—Ed.]

blues, to violets. These form the spectral colours. From this it will be seen that a white ray of light can be resolved into the colours of the rainbow, and that all the colours of the rainbow together produce a white ray of light. This unity of white is produced by a combination of the three primary colours.

The Primary Colours are those which cannot by any known process be further resolved. They are not produced by the combination of other colours. The primary pigments of the palette, red, yellow, and blue, are not the true primaries of the spectrum, inasmuch as they only produce a pale grey-white. As pigments, however, they are employed as primaries for the production of other colours. Therefore in this work the primary colours are taken as red, yellow, and blue, and are shown touching the first or inner line on Chart Ia.

Secondary Colours are combinations of two of the primaries, and are shown on Chart Ia, touching the second line : for instance, red and yellow=orange, yellow and blue=green, and blue and red=violet. These secondary colours may incline more or less to either of the primaries, thus producing what may be termed intermediate secondaries. They are shown on Chart Ia, touching the third line, and may be called red-orange, yellow-orange, yellow-green, blue-green, blue-violet, and red-violet.

Pure Colours are the pure washes of the three primary, the three secondary colours, and their six intermediate tones. It will be seen that not more than two of the primaries are employed to produce any of these colours or tones. If a third primary had been employed it would have dulled their purity.

Broken Colours are the pure colours broken up by the addition of white or broken down by the addition of black. Broken colours, therefore, are the dulled tones of pure colours : not only is the purity affected, but in some degree the tone also. For instance, black added to yellow gives it a greenish tone. Chart IIIa is a chromatic circle of graduated broken colours. The colours within the centre ring are the same shades as those on the inner side of the centre ring on Chart IIa.

Tertiary Colours are combinations of nearly equal proportions of two secondaries, thereby introducing some of the third primary. This can easily be seen on the outer colour-rings of Chart Ia : orange and green=citrine, green and violet=olive, and violet and orange=russet. Citrine, therefore, although composed principally of yellow, has a due share of blue and of red. Olive and russet, it will be seen, are also composed of the three primaries. Every mixture of the three primaries is a step towards blackness until, with balanced proportions, actual black is produced. The tertiary colours may incline more or less to either of the secondaries, thus producing a change of tone as seen on the outer colour-rings on Chart Ia. Tertiary colours in their lighter tones are called greys.

Complementary Colours are those which contain the completing or finishing colour or colours necessary to form the spectrum or white light ; for instance, we know that the primary pigments red, yellow, and blue produce a pale grey-white, therefore the complementary colour of red would be the completing colour green (yellow and blue), the complementary colour of yellow would be the completing colour violet (red and blue), and the complementary colour of blue would be the completing colour orange (red and yellow).

So much depends upon the proper use and appreciation of the complementary colours that some care has been taken to devise a means of adjusting the differences between the complementary colours of the palette and complementary colours of the spectrum. Chart IIa shows twelve pure colours arranged in a chromatic circle. A circle is divided in its circumference into 360 degrees. The complementary or completing colours of the palatte are found to be on the opposite diameter ; in other words, they are separated by 180 degrees, or half the circumference of the circle ; for instance, green is found opposite red, yellow opposite purple, and blue opposite orange.

A more near approach to the true complementaries of the spectrum is found in those colours separated only by about 150 degrees, or those colours to the left of the opposite diameter. By using the revolving Disc IIb within the limits of the slot and pin, fixed at the point marked, the following combinations are successively seen :—

Blue	and	orange-yellow.
Violet-blue	,,	yellow.
Violet	,,	green-yellow.
Violet-red	,,	green.
Red	,,	green-blue.

These may be taken for all practical purposes as the most effective complementary colours. Seen in pairs, they produce in each other the most satisfying effects and the strongest contrasts.

Warm and Cold Colours.—Those colours in which red or yellow predominate are called warm colours, and those in which blue predominates are called cold colours. Referring to Chart IIa, it will be seen, for instance, green-yellow and violet-red are warm colours, and also the yellows and reds between them. It is possible to use the term warm or cold to an individual colour ; for instance, a violet-blue might be termed a warm blue or a cold violet, a yellow-green might be termed a warm green or a cold yellow, etc.

Gradations are the gradual changes from colour to colour, and from light to dark.

Shades are the gradations of a colour from light to dark by the addition of white or by the addition of black ; for instance, Chart IIa shows the shades of twelve pure colours. The pure colour is seen in each between the centre rings. The shades from the pure colour to the black are the broken colours graduated with an admixture of black. The shades from the pure colours to the outer extremities are graduated with an admixture of white.

Tones are the gradations of a colour by the addition of another colour. For instance, on Chart IIa are shown some of the tones between the primary and secondary colours. There are, of course, innumerable others; a whole scale of red shades may be altered in tone by the introduction of blue, thereby making the reds more violet, or by the introduction of yellow, thereby making the reds more orange.

Hue has a similar meaning to that of tone, but the word is mostly confined to popular speech and poetry, and is mainly significant of brilliant colouring, as the hues of the rainbow, or the hues of the flower garden.

Tints is similarly employed for pale shades. It is mainly significant of soft colouring, as the tints of autumn leaves.

Scale is a collection of the tones of a colour, including its shades and its tints. For instance, each graduated colour on Plate IIa is the scale of that colour.

Chromatic Scale is the entire gamut of the primary and secondary colours, with all the intervening tones and shades.

Chromatic Circle is an arrangement of the colours in a circle so that the reds join with the violets. Charts IIa and IIIa are graduated chromatic circles.

Brightness of a colour depends upon the amount of light that it reflects, and is independent of its purity. It will be noted on Chart IIa that the lighter tones or tints possess more brightness than the darker tones or shades.

Intensity is the quality of a colour in which the greatest purity and the greatest brightness unite—so much so that if the brightness were increased the purity would decrease.

Contrast is the effect produced by the nearness of two or more colours, tones, or shades. For instance, if red and yellow be placed together they will affect each other: the red will acquire a slightly violet tone, and the yellow will acquire a slightly green tone. If a dark and a light shade of any colour be placed together, the dark will appear darker and the light lighter.

Simultaneous Contrast is the effect produced when two shades or colours are seen together. For instance, they will appear as dissimilar as possible, both in the composition of the colours and the height of the shade. The results may be harmful or beneficial to each other.

Successive Contrast is the effect produced when two shades or colours are seen after each other. For instance, having looked for a certain length of time on one colour, it will be found that the next colour looked at will be affected by the complementary of the colour of the first. The result may be harmful or beneficial.

Harmony.—This word has a different meaning when employed in reference to musical matters to that which it has when employed in reference to colour and design. Harmony of colour consists in a combination of many qualities subjected to the same influence to secure one pleasing purpose: for instance, the harmony of colour by gradation, the harmony of colour by contrast, the harmony of tone, the harmony of proportion or balance, etc.

BEAUTIFUL COLOURING.

The theory of colour-production depends upon the combination of the primary colours in different proportions, and it must be noted that true value of the colours depends upon the juxtaposition of one to the other. Colours are so altered by the manner in which they are seen together, that it becomes essential for all users and sellers of coloured goods to acquire some knowledge of the theory of colour-production and colour-selection. They will, in their everyday occupation, easily realize how to obtain the best advantages from colour, whether in the manner of presenting coloured goods in windows or show-rooms, or in securing the best combinations for wearing apparel, or for the decoration of the home.

There is a great difference between appreciation of colour and manipulation of colour. Any one can be schooled to a proper appreciation of colour.

In tropical and sunny latitudes less courage is required in using bright colours, because the brilliancy of the sun subdues them, and the people in these countries have rightly appraised the value of this property of light. Northerners, however, require stimulating colours more than those who live in warm sunshine, and fortunately bright colours have a greater force in dull climates.

We have been so accustomed to the dowdiness of drabs and the gloominess of greys that it is even assumed that people of taste should admire dull colours, and that only vulgar persons like bright ones.

The love of colour, however, is now awakening, and we can expect with certainty a greater luxury of pure colour inside our houses. In time more of it may peep out of doors, and then show itself quite bravely to cheer the greyness of our towns.

In considering the application of brighter colours in our homes and surroundings, the two main attributes of beautiful colouring should be insisted upon : Gradation and Contrast. The sellers and users of coloured materials will realize the importance of grasping these two essentials in their everyday application.

GRADATION IN COLOUR.

The first essential of beautiful colouring is *gradation*. No entirely beautiful colour exists without the quality of gradation. For instance, compare one of the pure colours on Chart Ia with the same on Chart IIa. The first is certainly a fine colour which, looked at alone, almost jumps into the eye ; the second, by its gradations, glows with a fascination never yet obtained from an ungradated colour. Certainly the most subtle beauty in colour is that of gradation, either of tone or of shade. Gradation is to be seen everywhere—in sky, on earth and water. An example of gradation of shade has been referred to on Chart IIa. An example of gradations of tone can be seen in the outer colour rings in Chart Ia. The shades here are practically the same, but there is a change of tone that produces a certain luminosity that is not evident in a dull ungradated colour.

Plain coloured surfaces, under most conditions, emphasize the most beautiful attribute of colour—that of gradation. The play of light on a surface produces a far finer and more luminous gradation than any made by pigments. The effect is almost as fine on the plain coloured walls of a room as on the folds of a curtain or on those of a robe. The difference between the deepest shade and the lightest tint is truly amazing. These gradations are a constant delight to those who look for them.

CONTRAST IN COLOUR.

The second essential of beautiful colouring is that of *contrast*. Practically all gradations are beautiful. All contrasts are not. It is the bad contrasts that usually constitute bad colouring. The everyday application of beautiful colouring requires that the theory of contrasts should be appreciated and understood. Contrasts are known either as simultaneous or successive contrasts. There are contrasts of shades, contrasts of tones, and contrasts of shades and tones. These are the qualities of contrasts. Contrasts are bad either in quality or quantity.

The sellers and users of coloured materials will realize that to safely employ courage in colour it is necessary for them to understand and avoid bad contrasts. With that object it will be helpful here to consider a few simple experiments.

1. Place in a good light, about twelve inches apart, two squares of a lightish grey paper or a material without gloss. Take two other squares of dark grey, and place one of these next to one of the lighter grey squares. Place the other dark one about twelve inches away from its companion in the opposite direction to the lighter one. Gaze at them for some seconds, and it will be seen that the light and dark squares together in the centre are either much lighter or much darker than their companions twelve inches away. The two squares side by side have not a uniform difference over their entire surfaces, but the greatest contrast is seen where they touch together. The foregoing is an example of simultaneous contrast in shades.

2. Place a black square on a red ground, gaze at a corner of the black for some time, and jerk it away with a piece of thread, keeping the eyes fixed upon the space it occupied. It will be found that this space then acquires a more intense red than the remainder of the ground, which will be dull, as if it had been broken down with black. This is an example of successive contrast in shades.

3. Take two squares of the same red paper or material without gloss, place one square on a ground of similar red, and one square on a ground of green of about the same intensity. The difference in the two red squares will be so great that they give the impression of entirely different colours. This is an example of simultaneous contrast in colours.

4. Place a blue square on a red ground of similar intensity, gaze at it for a time, and then jerk away with a piece of thread. In the place occupied by the blue square will appear an orange-red image. This is an example of successive contrast in colours.

5. Place two squares of the same red material or paper about twelve inches apart. Take two squares of the same yellow material and place one of these next to one of the red squares. Place the other yellow square about twelve inches away from its companion in the opposite direction to the red ones. Gaze at them for some seconds, and it will be observed that the outside squares will appear normal red and normal yellow, while the same colours placed together will appear to have mixed with them the complementaries of the one beside it. The red will become purplish and darker, and the yellow will become greenish and lighter. The foregoing is an example of simultaneous contrast in shades and colours.

6. Place a small square of red in the centre of a ground of grey, remove with thread as before described, when an image of greenish blue will take the place of the red square. This is an example of successive contrast in shades and colours.

7. Place a small square of grey in the centre of a large ground of green paper or material. Notwithstanding the much larger surface of the green, unless one stares for some time very little change is apparent. Cover the whole with a sheet of white detail paper or white tissue paper, and immediately the small square of grey becomes a pale red. This example shows that the contrasts of intense colours are less evident than the contrasts of lighter shades.

These seven experiments are typical of hundreds of others which can be made with various combinations. All of these experiments prove that if two colours are seen together, either at one time or within a very short interval of time, they will appear as dissimilar as possible, both in regard to their shades and colours.

The colour charts should now be considered. Although there are only twelve colours, shown on the chromatic circles, Plates IIa and IIIa, it must be clear that innumerable tones exist between any two of these colours : each of these tones possesses its scale of shades, and each of these gradations can be broken down or up as has been done with the twelve colours of Chart IIIa. In addition, every step of colour between a secondary and a tertiary has also its scale of tones, and these again can all be broken down or up, so that the hundreds of colours and tones are produced from the primaries red, yellow, and blue. The colour charts only indicate mere guiding-points of colours, and tones and shades, and enable us to trace back their component parts to the three primaries.

To appreciate the development of the chromatic scale, an interesting experiment can be made with an ordinary prism of common glass. Hold this to the light and turn until the spectrum is seen red on top and violet below ; turn until these colours join in forming a band of bright red, green, and violet. Slightly turn the prism again, and the band broadens to reds, oranges, yellows, greens, blues, and violets. These and the innumerable gradations existing between all of them are the spectrum colours which we strive to imitate with pigments. All pigment colours are dirty compared with the spectral colours. The nearest approach to them is to be found in fine stained glass held to a bright light.

COURAGE IN COLOUR-SELECTION.

To revert to the consideration of contrasts, colours may be chosen so that they are mutually helpful and appear precious and beautiful, or they may be mutually harmful and appear either glaring and gaudy or dull and dirty.

By referring to Charts IIa and IIIa it is evident that the complementary colours appear the most complete and lustrous. For instance, by using the revolving Disc, IIb, it will be seen the reds, for example, become more red and the greens more green; this is further proved in the third experiment, where the two complementary colours are made to appear more lustrous, producing a helpful contrast, whereas the two identical colours are made to appear dull, producing a harmful contrast.

It will be further observed that colours other than the complementaries, when they are brought into contrast, appear to be moved farther apart. For instance, with red and yellow in juxtaposition the red is moved nearer to purple, and yellow nearer to green. This is proved by the fifth experiment. In this case the contrast is somewhat harmful, and produces a gaudy effect, particularly if used in nearly equal masses.

CONTRASTS OF TONE.

We know the most helpful contrasting tones to be the complementary colours.

A simple method of avoiding bad contrasts of tone is to approximate the position of the colour on the chromatic scale, and use the revolving Disc IIb with the pin within the slot; this will show approximately the complementary colour. Good contrasting pairs of colour can be secured by taking any of those found by the disc, if used without the pin and slot.

Bad contrasting pairs of colours are those closely related, or those standing near each other on the chromatic circle without any gradation between them. For instance, red and orange, blue and violet, green and blue are all bad contrasting pairs of colours, particularly in the lighter shades. It will be noticed that these are less than a quarter of the circle, or 90 degrees, apart.

A good method of obtaining an uncommon and effective contrast is by pairing related colours not less than 90 degrees apart. For instance, red with yellow-orange or orange with violet-red will make a courageous combination that could be well employed to produce a striking effect. The same may be said with all the other colours similarly placed: blue and violet-red, or violet and green-blue and green and violet-blue, or blue and green-yellow. It is desirable to consult the charts to appreciate these points.

The names employed are used arbitrarily to cover a group of colours, tones, and shades, which owe their origin to these primary or secondary colours. A very small proportion of actually pure colour is seen in nature; it is usually surrounded with its own tones and shades, and they in turn are supported by the greys and broken colours of the same or other groups of colours.

CONTRASTS OF SHADES.

Having considered in a general way the contrasts of tones, we may now consider contrasts of shades. These are *very frequently generally* ignored, and this must be held responsible for most of the bad colour contrasts and combinations. Disc IIIb is used to determine the corresponding tones on the chromatic circle. It also divides up some of the shades on the twelve different colour scales shown.

It will be found that different shades on the same scale make good contrasts. It will also be found that in any pair of complementary colours the different shades in each, used indiscriminately, will contrast well.

These observations apply not only to the pure colours in the chromatic circle, but also to the broken colours and the tertiary colours and greys.

The bad contrasts are usually those in which the contrasts are mixed; that is, a contrast in tones and a contrast in shades is found in the same combination. For instance, in any pair of good contrasting colours the corresponding shades of each will contrast well, while different shades will have a poor effect. The corresponding shades are easily seen with the Disc IIIb. Some æsthetic skill is required before making good mixed contrasts in tones and shades.

THE USE OF PURE COLOUR.

The foregoing are considerations upon the qualities of contrasts: there only remains the consideration of the quantities of contrasts. In most colour schemes it is desirable to have a dominant tone, which should be supported with a small proportion of a good contrasting colour, or with a small proportion of a purer colour of the same group. The nearer this supporting colour is to a primary, or the nearer it is to a pure colour, the less there is required of it. What is given up in mass is gained in brilliancy.

This will be made clear by using the Disc Ib on Plate Ia. It will be seen that a very small proportion of the primary blue is required as a contrast to the orange-citrons, and a somewhat large proportion of the yellow-orange secondary is required. Or take the olive green as the dominant hue, and the same observations apply: more of the yellow-orange secondary as a contrast, or less of the blue primary, which belongs to the same group as the olive green.

This Disc may also be employed on Plates IIa and IIIa for those who wish to obtain good mixed contrasts of tones and shades. It is assumed that the lighter tones are the dominant hues, and the supporting colour is purer, and therefore, in smaller proportions. As above explained, the nearer to a primary, or the nearer to a pure colour, the less is required of the supporting colour.

Only pairs of colours have been considered at present, but if, as a basis, these are well chosen both in qualities and quantities, it is not a difficult matter to determine upon another colour to provide balance or sparkle. This cannot be arrived at by any rule—feeling and judgment must be employed. Examples will be given in describing the various decorative schemes.

It is desirable to make careful observation with the various experiments, and with the discs on the coloured plates, judging and comparing both with black and with white. Also make the tests in bright daylight, dull light, and night light. Note the observations, and apply them to one's daily work, using the charts as often as possible. This will lead to attempting the use of more pure colour and more striking contrasts in our surroundings. It may be here observed that the atmospheric action of smoke or sun will soon reduce the pure colours on Plates IIa to more nearly resemble the broken colours on Plates IIIa. The latter are quite beautiful colours, and as pure as we can yet hope to employ in a mass, unless under exceptional conditions.

General Rules to be Observed.

The following general impressions of colour-combinations will be noted, and others should be added as they are observed.

1. The best contrasting colours are the complementaries.

2. Similar shades of two complementaries make excellent combinations.

3. Any shade of two complementaries makes good combinations, but care must be taken that they are shades of the same tone.

4. Any shades of one colour make excellent combinations, but care must be taken that they are shades of the same tone.

5. Colours more than 90 degrees apart make good combinations, but should be only used together in similar shades, excepting the complementaries.

6. Colours only 90 degrees apart make risky but striking combinations, and should only be used together in similar shades.

7. Colours less than 90 degrees apart make bad combinations, unless in small gradations.

8. Different shades of all contrasting colours, excepting complementaries, make bad combinations. The primary colours *en masse* are too vivid for a dull climate, and the tertiary colours are too dingy, therefore the primaries should only be employed in small quantities, to give sparkle; if tertiaries are employed they should be associated with some bright colour of the same group, or of the complementary group.

9. It is always risky to use three primary colours alone in a decorative scheme: never attempt it if they have to be of about equal proportions.

10. Many pure or bright colours seen together have usually a bad effect. There is one method, however, by which a very beautiful and striking result may be obtained: that is, by using the pure colours in comparatively small quantities against a mass of black: a draper's window, for instauce, might be draped with folds of a dull black material, and pure or bright colours could then be shown in

small proportions quite indiscriminately, and they will appear to sparkle with brilliancy.

11. Pure colour should be used sparingly to produce a good effect; as, for instance, a bright-coloured trimming upon a broken colour or tertiary of the same range. The proportions and tones can de obtained by means of Disc Ib. A superior effect is secured by using the lighter shades for the principal articles, and the deeper shades for the accessories.

12. A pure colour can always be used on black with good effect; the black may assume a slight hue of the complementary.

13. A pure colour on white appears brighter and deeper, and faintly tints the white with its complementary.

14. A pure colour on grey of a proper height usually appears purer than either on black or white. The grey assumes a stronger hue of the complementary than either black or white. Care should be taken that the grey (which isa light tertiary) should be preferably of the same group, or of the complementary group of the colour used.

15. Don't be afraid of using black: it is far more helpful than either white or grey, particularly with striking contrasts. A striking window-display—say of white straw hats—can be obtained by draping black velvet or cloth as a background. This represents a contrast in shades.

16. To make a range of textures into a striking window or show-room display, use as a background a mass of the complementary colour. For instance, a range of blue textures could have as a background a deep yellow orange. This represents a contrast in tones.

17. Contrasts are more pronounced with cold than with warm colours. If deep and pale colours are placed together the latter is generally injured, unless the two colours happen to be complementary.

18. If similar-coloured goods are seen together they appear duller, and if a succession of goods of one colour be shown, the last will appear quite faded and dirty. This is most important to all persons showing colours. If a buyer is to have a true appreciation of colours shown in succession, an excuse must be found to introduce the complementary colour occasionally, even if in another material. For instance, if the last of the series of bright red books is not to appear faded and dirty, a piece of green-blue cloth or a green blue book should be looked at. For this purpose the charts should be always handy until the salesman has mastered this essential knowledge.

19. In dressing windows or show-rooms, complementary colours should always be shown together if the best value of each is to be obtained.

20. A successful window or show-room treatment is to dress them either in gradations of shades or in gradations of tones. This gives a breadth and boldness which is bound to attract.

21. If a window or show-room is to be dressed in shades of one colour, the shades should be placed to grade from lightest to darkest, or vice versa. If it be dressed in gradations of colour, then the goods should be placed to grade through the different tones from colour to colour—say from purple through blues and greens to yellows—but the gradations should be of small intervals.

22. If figured goods of a similar tone are to be shown they should be separated by contrasting self-colours or by black or white or grey.

23. Masses of different colours should be shown in the same shades. Try not to show mixed contrasts of shades and tones.

24. It is easier to combine deep broken colours than pure colours or light colours.

25. In colour-combinations endeavour to obtain balance; avoid one colour in a scheme attracting the eye. This can frequently be done by lowering the shade of the offending colour.

26. In all combinations it is necessary to introduce at least one warm colour. Some of the aniline dyes have a degree of intense purity which is very undesirable, and when seen in strong daylight they appear to jump into the eye so as to give a painful impression and produce an extremely gaudy effect. This applies particularly to intense colours in large surfaces such as walls and complete dresses, etc. In smaller articles these intense colours are more allowable, and if associated, for instance, with black, they frequently produce an almost jewel-like effect.

27. To minimise a harmful contrast use a smaller amount of one of the colours, or introduce a third colour of considerable distance in the chromatic circle.

28. Greens are most difficult to manage together: a combination of various tones of green alone, even if carefully graduated, is not pleasing. It is necessary to introduce another colour to relieve the combination from dullness.

29. Bits of blue do not look well. Blue should always be used to the fullest extent possible.

30. Avoid realistic representations of natural objects; don't attempt to imitate nature: you can't. Use conventional substitutes instead.

31. Dull rooms require bright colours, and in bright rooms use dull ones. A sparkle can be introduced into the dull colour by a small proportion of its complementary.

32. The treatment of a room, or of a window, should be considered as a whole. Every colour introduced will have its effect upon the other colours.

33. Great repose and dignity is obtained by plain surfaces. It is amazing to find what satisfying results are obtained by plain coloured surfaces. Only care and courage are required in selecting the tones.

The foregoing remarks and the charts and discs will make this task quite simple, and the student will rapidly discriminate between good taste and bad taste in colour and proceed to employ greater courage in the use of colour on every opportunity.

Far more effect can be obtained by colour than by ornament, and in addition to this, there is far greater economy in the cost.

ECONOMY OF COST.

It is the purpose of the schemes shown in the recently published book on *Home Interiors* that they should entail little or no extra money to that usually expended on similar rooms if they had been treated in the orthodox manner ; that is with ornamental cornices and centre ornaments, exaggerated architraves and mouldings, stained-glass windows, and heavy venetian blinds ; ornate stoves and mantelpieces, and a decent quality of wall paper. The carpets, curtains, furniture, and fittings might all be comfortable and lasting, but possibly mixed together without any proper consideration for the general effect of the whole.

A well-appointed room is one where nothing particular is in evidence excepting an agreeable sense of comfort and utility. To obtain this requires far more thought and knowledge than is generally supposed. Not only must the room be a pleasing unity in itself, but the best results must be secured from its component parts and the general effect of the room must accord well with its surroundings.

This is a large field to cover : many features have to be considered, and controlled by definite guiding principles. They have to be co-ordinated into one agreeable whole, and expert knowledge of the various industries has to be applied before reliable advice can be offered.

A well-considered scheme appears to be worth far more than its actual cost. In this respect alone a great economy is effected and will repay the time and thought required in considering the matter.

HEALTH-GIVING COLOURS.

There is one other aspect to be constantly borne in mind in the employment of colour. I leave this to the last as it may be considered of the most dominating importance. That is the selection of colour from a scientific stand-point. The scientific influence which colour has upon life generally has been but little understood. It has been conclusively proved that whereas blue has a most stimulating and health-giving power, green produces entirely the reverse.

Anybody can prove this for themselves if they will take a series of cloches or the glass bells, used in French gardening, These should be of all colours, and if placed over any living object, such as plants, insects, etc., it will be found that those under the blue cloche will increase in size, vigour and vitality, and those under the green cloche will wither away rapidly. It will further be found that the colours between the blue and the green will run in the following order of life-giving properties :—blues, violets, yellows, reds and greens.

You will further realize how in the selection of the colour decorations of our homes, this aspect of the question should be constantly borne in mind and how much more so in the hospitals and sanitoria, and these, unfortunately, frequently err in this respect. Whereas a patient will have a hopeful stimulating outlook on life if lying within blue surroundings, an entirely opposite effect will be obtained if surrounded by greens and reds.

Discussion.

Mr. S. Bylander in proposing a vote of thanks to the lecturer, said Mr. Lovell had explained very clearly the relation of colours in combination and contrast. He was personally acquainted with Mr. Lovell, and was associated with him some years ago on a large building in South Africa, and therefore he knew the extent to which Mr. Lovell applied himself to the question of colour in relation to buildings. Mr. Lovell had been a great traveller, and endeavoured to apply in his work the beautiful combinations of colour he had observed in Southern climes. It was a great advantage to the Society to have Mr. Lovell as one of its Vice-Presidents, and as a lecturer. Even those who, like himself, knew very little about colour, had been able to understand and grasp the elementary principles of colour combination which Mr. Lovell had placed before them so clearly.

Mr. Frank E. Bishop seconded the vote of thanks to Mr. Lovell, and said that the paper had proved very instructive to them, and would be an incentive for further study of the question.

Mr. J. P. C. Chaures (sous Patron Beaux Arts Atelier), expressed on behalf of his friends at the Atelier and himself their appreciation at the way in which Mr. Lovell had dealt with the subject. There was one point which called for comment, and that was, seeing that Nature constantly presented green landscapes to their view, why was this colour to be eliminated from the palette of the decorative artist in dealing with home interiors.

Mr. G. Leslie Wilkinson, A.R.I.B.A., thought they would not now need courage in colour, for by using Mr. Lovell's chromatic discs and circles the various combinations were found for them automatically. They were accused of lack of courage when they used white or black, which they employed, he thought, because they knew the value of them. Mr. Lovell's remarks would tend to destroy one or two popular fallacies in regard to colour. They would never hear again of one having a fit of the blues, seeing that blue was stated to be a life-giving colour. He was sure that Mr. Lovell's remarks on the application of colour to window dressing would be taken note of by those responsible for window displays. The general aim seemed to be, not so much to please, as to hit one in the eye. He hoped that Mr. Lovell's new book on colour would be read and followed by all concerned, so that their artistic susceptibilities would not suffer as they walked about the streets.

Mr. Noel D. Sheffield (Member of Council), said it was rarely that they had a speaker like Mr. Lovell, whose popularity had drawn a full house. The Society should now have a counter irritant, so to speak, in the form of a lecture on colour-blindness. He did not suggest that Mr. Lovell was colour-blind, but it might be interesting to some to know that colour-blindness was directly confined to men. Women were never known, so far as he was aware, to become colour-blind, which possibly was the reason why they went in for brighter garments than the sterner sex. Mr. Lovell had not said anything about the effect of artificial light on colours. In the well-known wool test for engine drivers and others, on many occasions the right colour had been picked out, but when it came to testing them by artificial light they were quite incapable of naming the correct colour. Another point in regard to colour was that, as children, they were all told that green was green and red was red, and so forth, but how was one to know that one didn't see green as Mr. Lovell, for instance, saw red. They all called green, green, because they had been told to do so, but that did not prove that the colour which one saw and called green was the same colour that Mr. Lovell knew as green. Colour and sound he understood were very much allied. Sir John MacDonald, in a little booklet issued some years ago, said colour and sound were actually the same, being produced by vibrations at different rates. The nearest approach in sound which the human being could associate with colour, was the squeak of a bat. A dog could distinguish a much sharper sound than that, but there was still a tremendous difference between the squeak of a bat and colour. It was difficult to believe that they were actually produced by the same vibrations. With regard to colour schemes for home decoration, he had introduced in his own house, white walls with buttercup yellow wood work, black architraves and skirting, and a primrose ceiling, but it was not at all successful. The peculiar thing about it was that nobody ever noticed it until it was pointed out to them.

COL. F. S. LESLIE (Hon. Secretary), said one aspect of the difficult question of colour which had not been touched upon, was as to what made a so-called red brick red, and a green leaf green. There were various theories to account for it, but none he thought were worth very much. He asked whether all objects and materials had the property of breaking up light and of diffusing the rays so broken up, or by absorbing or transmitting others. More mysterious still was the way those rays were transmitted to the brain. What did the rays do, he asked, when they passed through the eye and impinged themselves on the retina ? After hearing Mr. Lovell's paper he began to understand why it was that in some old country houses the rooms were known as the " blue room," " green room," and so on. He could now realize that when a guest was wanted to stay any length of time, he was put in the blue room, and when they wanted to get rid of an undesirable one, no doubt they put him in the green room.

MR. R. GEO. BARE (Past Hon. Librarian), said Mr. Lovell's paper must have far surpassed the expectations of many of them. The lecturer's wonderful knowledge of the gradations and combinations of colour set out in his paper and in his new book were worthy of further consideration. He would certainly make a point of possessing Mr. Lovell's book on the treatment of colour in their homes, which was a most important subject.

Mr. Richard Lee asked for information with respect to the death dealing qualities of green. How were they to explain the apparent preponderence of green in Nature? Not being an artist, it might not be apparent, but at any rate green seemed the paramount colour.

Mr. Ellis Marsland (Past Hon. Secretary), humorously remarked that the title of the paper had led him to imagine that Mr. Lovell would speak about the dull and dingy appearance of the streets, and would propose some grand colour scheme. For instance, the man who sold lemons might have the whole of his shop front painted yellow, and one in the laundry line could have it painted blue, and so forth, making altogether a grand colour scheme. It seemed to him that the Society had shown a great deal of courage in the colour combinations used in the lecture room, which were quite opposed to the doctrines of the lecturer. He would have Mr. Lovell's warnings and suggestions to ladies in regard to colour combinations pinned up at home, for the benefit of all concerned.

Mr. J. Herbert Pearson (Member of Council), said that it was a surprise to him to hear that green was such a deadly colour, seeing that it was so frequently used for decorative purposes. He agreed with Mr. Sheffield that the effect of artificial light on coloured decorations was very important; for instance, in the case of pale blue and pale green, it was almost impossible to tell one from the other under artificial light.

Mr. A. H. Salisbury (Member), said the question of the effect of colours upon health, and the condemnation of green, was one which the younger generation of architects would have to consider very carefully. They had a habit of putting in red and green dining rooms, and if it was a fact that green had a prejudicial effect upon health, he understood why it was that he sometimes played billiards very badly. A very happy effect was produced he thought by the green cloth and the red balls, and the coloured decoration usually indulged in, such as red shades, and so on. Home decorative schemes were, he thought, important for architects, and the question of colour opened up possibilities for serious study, and much of the lecturer's remarks would prove a valuable help. Mr. Lovell had referred to the work of stained glass artists, and it had been his (the speaker's) pleasure to look through the work of a stained glass artist in his studio. Some appealed to his sense of beauty, and some seemed to jar. Mr. Lovell in his paper had laid down theories which really effected one's judgment. When they throughly understood the principles which should guide them in selecting harmonious combinations, they would be able to appreciate the colours they saw about them. There was a tendency to condemn brilliant colours as gaudy and in bad taste, and it was perhaps a habit they had got into of selecting the duller tones, thinking that they were thereby showing more refinement, and there was another reason inasmuch as in working in the quieter colours they were less likely to commit grave sins. If however, they followed and grasped the principles which Mr. Lovell had put forward, they would be able to indulge in the stronger colours with very happy effects and health-giving results.

Mr. Adrian Berrington, said that the lecturer had put before them all the essential facts with regards to colour, and not mere opinions. He had gone even further and given them an exceedingly marvellous mechanism by which complimentary colours and satisfactory combinations might be found, which seemed to obviate any necessity of having courage at all, provided they acquired Mr. Lovell's discs and charts. Something further was required however, as no discs or charts were of use unless they had a colour to begin with ; some definite starting point, and this should be the physical nervous, mental and spiritual re-action of colour on the health of individuals, first ascertained and used scientifically. For instance, supposing it were found that blue gave a tonic affect in this or that individual, then by the use of the colour chart they could find a suitable relief. A great deal remained to be proved. Certain guiding principles might be drawn from Nature, which he thought would in many cases have to be their starting point. All living things were happiest in their natural condition. If colour in the surroundings of human beings affected their health, it no doubt had some influence on their stature. The immense proportions of the Scandinavian might be attributable to the blue skies under which he lived, and the insignificance of the pigmy of the Australian bush might be due to the dense green of his surroundings. Possibly the beneficial effect of a blue room was the re-action it raised in one's self to counteract it. Those who habitually moved in a green environment usually possessed, he thought, a doubtful out-look up on life in general. The effect of sunlight on colour was to diminish the latter in relation to the amount of light upon it, in other words, when the sun went down, colour came up. Although winter was referred to as a dismal time of year, the red of bricks, and the green of the trees and shrubs were very much more emphatic than they were under the summer sun. When the sun shone, colour declined as a compensation to retain the proper balance. One excellent colour scheme for a dining room he had seen carried out in a house at Liverpool, and unlike the experience of the previous speaker, everybody noticed it on entering the room, and speaking generally, were charmed with it. The carpet was bright green, the walls a shiny black, and the ceiling crimson ; with the complementary white of the table-cloth and of the silver, a most excellent result was obtained.

Mr. A. A. Atkins said, that most of the remarks had been made from the point of view of the adult, but another aspect of the question was the effect of colour on children, and those who attended the schools. Bright colours, he thought, made it so much easier for the teachers to perform their duties, and they were enabled to train their pupils to a higher standard than they were when surrounded by sombre colours. In the decoration of public schools, they had a very powerful influence upon the advancement of the younger generation.

Mrs. Curtice, said the last speaker had given her considerable pleasure in drawing the attention of the claims of the children to consideration in questions of colour. Colour to her was a positive joy, engaged as she was daily in educating children in one of the greaest parts of London. She was constantly trying little experiments in the direction of the effect of colour on children, and she had found that the younger children all admired a bright object. As they got older they lost to some extent the sense of pure colour. Some sort of refinement she thought must be attached to a pale heliotrope or a pale pink. One occasionally came across a child with real feeling for colour, and who made no mistakes in colouring. She wondered whether Mr. Lovell's discs would enable her to make children see the colours they might use together. The child who did nothing wrong in combining colours was one in every 200 or so, and for the rest, it would be a great help, she thought, if Mr. Lovell's charts and discs could be used in getting them to see the satisfaction that could be obtained in using the right colours together. Everybody had their own taste in colours, but if one could make them see that there was an exact science about the matter which might be learned and which would teach them what to use together, and what to avoid in combination, it would be a very great advantage.

Mr. Varley thought the arguments regarding the deleterious effect of light upon health might be carried still further. Mr. Lovell had referred to the use of the cloche in France and elsewhere, but he thought that the effect of filtered light was rather different to that reflected from coloured surfaces. So far as he understood the matter, different colours filtered light in very different ways. He asked whether it was the effect of green surroundings that was deleterious to life, or the light filtered through a green substance. If the latter, it would not prove that green as a decorative colour, was harmful. If light filtered through green glass was injurious, then they must never live under a green sky-light.

Mr. Lovell, in reply, expressed his thanks for the kind references to himself and his work, and for their appreciation of his paper.

As Mr. Marsland had pointed out, no doubt, the proper course for him to have adopted in addressing a Society of Architects, was to launch out into a big architectural colour scheme. He left it to the majority of the colourists in the room to say whether London was not already one of the most beautifully coloured cities in the world. In the West End of London on any fine afternoon, between three and six, one could see the most beautiful tones of browns and greens merged into a fine colour effect. It would be presumption on the part of any architect to try to evolve a colour scheme for their city when Nature had done so much for it.

There were two difficult problems before them in dealing with colour, which were in absolute conflict. He referred to the scientific aspect as opposed to the artists' conception of colour. The colours of the spectrum which produced the wonderful cinematograph films were altogether different to the colours which artists dealt with. Colour was obtained by vibration, and therefore, the references to sound and colour were perfectly correct, but there was a tremendous difference between the two aspects. He had not the ability or the presumption to explain the scientific aspect, he could only advise them to go to Sir Oliver Lodge, if they wanted to know why a red brick was red, and why an image impinged itself upon the retina of the human eye. He had only endeavoured to show in a humble way, some method by which the colours they were handling every day could be assorted and combined with agreeable results. It was a very interesting subject, and he was grateful if he had just opened the door for them to gather a little insight which would encourage them to develop it on their own lines.

He had referred in the commencement of his paper to the effect of bright colours on children, and the point raised by Mrs. Curtice had been in his mind from the time his discs were evolved. It was hoped in a short time to have the charts and discs reproduced in a smaller and much more handy size, so that they would be available for every child. It would give children a much more healthy out-look upon life if they could be taught to appreciate what was good and what was bad in colour in a simple way.

Some artists thought that it was for the elected few to interpret colour, but anybody who took the trouble could master the principles involved. Adults had preconceived ideas with regard to colour. For instance, many would say a certain colour was green; whereas, a child would say that it was brown or blue, particularly if it started with a colour chart. He agreed with Mr. Berrington in his reference to the effect of sunlight on colour. They said that green was green, but with the sun shining on it, it was not green but yellow, and anyone who tried to represent it on paper as green would make a botch of it. Most people had a wrong appreciation of colour; they knew that a leaf was green, and many still called it green, although at a distance it developed into a brown or russett.

People who lived in the country were supposed to be more vigorous than those who lived in towns surrounded by ill-assorted colours. The sky, which on account of the great space appeared to be blue also, had a strong influence on health. A considerable amount of criticism had been raised over his last paragraph referring to the death-dealing qualities of green. These remarks had been shown to one who would some day be known as one of the greatest bacteriologists the world had ever seen, and he had expressed his opinion that every word contained in the paragraph referred to was absolutely true.

Some Newspaper Criticisms.

An appeal for more boldness and defiance of convention in treatment of colour was made by Mr. R. Goulburn Lovell, Vice-President of The Society of Architects, in an address entitled "Courage in Colour." He said he looked forward to the day when the "dowdiness of drabs and the gloominess of greys," to which we have been so accustomed, would give way to a greater luxury of pure colour inside our houses.

"In time," added Mr. Lovell, cheerfully, "this awakening love of colour may peep out of doors, and show itself quite bravely to cheer the greyness of our towns."

But Mr. Lovell was even more daring when he came to the subject of dress, for many lady guests were present.

"I know it is presumption on my part, a mere man," he said, "to discuss the colours of dress before ladies, but I should like to say that a little bit of the complementary colour—the finishing colour which is necessary to form the spectrum, such as green with red, violet with yellow, and orange with blue—will give astonishing results.

"If it is only a button or a piece of binding, the effect will be there; whereas the gaudy appearance of coloured blouses and home decoration is caused by the colours being all jumbled up together without any proper assortment. That is just the reason why they look gaudy!"

Mr. Lovell illustrated his point with a chart showing twelve pure colours arranged in a chromatic circle: red, yellow, blue, orange, green, and violet, and their six intermediate tones, red-orange, yellow-orange, yellow-green, blue-green, blue-violet, and red-violet.

"Now," Mr. Lovell continued, "as a circle is divided into 360 degrees and the complementary colours are separated by 180 degrees, or half the circumference of the circle, they will be found on the opposite diameter.

"For all practical purposes, therefore, the most effective complementary colours are these, because, seen in pairs, they produce in each other the most satisfying effects and the strongest contrasts: blue and orange-yellow; violet-blue and yellow; violet and green-yellow; violet-red and green; red and green-blue.

"Bad contrasting pairs of colours are those closely related or those standing near each other on the chromatic circle without any gradation between them. For instance, red and orange, blue and violet, green and blue are all bad contrasting pairs, particularly in the lighter shades. And it will be noticed that these are less than the quarter of the circle, or 90 degrees apart.

"Uncommon and effective contrasts are obtained by pairing related colours not less than 90 degrees apart. All these make courageous combinations which produce striking effects: red with yellow-orange; orange with violet-red; blue with violet-red; violet with green-blue; green with violet-blue; blue with green-yellow."

Mr. Goulburn Lovell laid emphasis on the scientific influence which colour has upon life, a subject which is, he said, but little understood.

"It has been conclusively proved," he said, "that whereas blue has a most stimulating and health-giving power, green produces entirely the reverse. Anyone could prove that statement for himself if he takes a series of cloches, or the glass bells used in French gardening. These should be of all colours, and if placed over any living object, such as plants, insects, etc., it will be found that those under the blue cloche will increase in size, vigour and vitality, and those under the green cloche will wither away rapidly.

"It will further be found that the colours between the blue and the green will run in the following order of life-giving properties: Blues, violets, yellows, reds, and greens.

"You will realise," continued Mr. Lovell, "how in the selection of the colour decorations of their homes that aspect of the question should be constantly borne in mind, and how much more so in the hospitals and sanatoria. In this respect errors are unfortunately too often made. Whereas a patient will have a hopeful, stimulating outlook on life if lying within blue surroundings, an entirely opposite effect will be obtained if surrounded by greens and reds."—*The Globe.*

Although the Vice-President of The Society of Architects, as we recorded yesterday, is of opinion that blue wall-paper stimulates, while green paper depresses, the latter colour is generally held to have the advantage of being restful to the eyes. Perhaps Mr. Goulburn Lovell has failed to allow sufficiently for the difference between transmitted and reflected light. Experiments show that a green glass "cloche" stunts the growth; but in this case the light is transmitted, while it is reflected from a wall-paper or a distempered wall. Perhaps the oculists will have something to say in the matter.—*The Globe.*

Mr. R. Goulburn Lovell, A.R.I.B.A., who has been addressing The Society of Architects on "Courage in Colour," and appealing for a more generous use of bright colours as a relief to the monotonous greyness of our towns, was asked to-day by a representative of the *Pall Mall Gazette* by what means more colour could be given to London.

"My answer to that," he said, "is that it is almost presumptuous for a simple architect to pretend to devise a scheme of colour for London when Nature does so much for it. For those who have eyes to see there is more colour beauty in London probably than in the majority of the most famous cities in the world.

"If any one will look down Oxford Street at any time in the afternoon or in any street looking west he will see the most wonderful panorama of colour effects.

"Even on this dull morning, look out over those houses, and you will see a rosy tint graduating into a pearly grey. What we lack is form, not colour—those villainous chimney-pots, those long, barrack-like buildings!

"Improve the form and increase the amount of bright spots of pure colour in the streets, by teaching the wearers of colours, and the drapers, and all the sellers of coloured goods, how to produce the most harmonious effects."

Amongst the rules to be observed, Mr. Lovell mentions:—

Many pure or bright colours seen together have usually a bad effect. Use the pure colours in comparatively small quantities against a mass of black.

If a window or showroom is to be dressed in shades of one colour the shades should be placed to grade from lightest to darkest, and vice versa.

Bits of blue do not look well. Blue should always be used to the fullest extent possible.

Dull rooms require bright colours, and in bright rooms use dull ones.

Great repose and dignity are obtained by plain coloured surfaces; but care and courage are required in selecting the tones.

Blue in the sick-room has a most stimulating and health-giving power. Greens and reds have an entirely opposite effect.

London Mr. Lovell described, from an artist's point of view, as a brown city, and Paris as a blue one. "And the colouring of London," he added, "is most beautiful. Nature does all except form. Go into Hyde Park, and you will find that the colours there, where nature is left alone, are wonderful. Or go to Somerset House, which is magnificent, palatial. Very few cities in the world can produce the effect that you get there.

"Go on to Westminster Bridge and look at the mass of buildings, finely grouped, and fine in form, and nature does everything. But in many of our modern buildings we lack form.

"The Royal Academy has just awarded a gold medal for a design from some of the younger men for a town hall. This design is ugly in form. Our leaders do not understand it. But they are going to."—*Pall Mall Gazette.*

A champion of "Courage in Colour" appeared at The Society of Architects last night, in the person of Mr. Goulburn Lovell (a Vice-President), who made an appeal for the more generous use of bright colours in the internal decoration of our houses and as a relief to the monotonous greyness of our towns.

Mr. Lovell condemned what he described as the popular impression that only vulgar people admire bright colours, and that people of taste must prefer the dull ones. "In these northern climes," he said, "there is a shrinking from pure colours, a fear that they may be termed gaudy, a general lack of courage in applying any colour to one's surroundings except tertiary tones and greys.

"In tropical and sunny latitudes less courage is required in using bright colours, because the brilliancy of the sun subdues them, but Northerners require stimulating colours more than those who live in warm sunshine, and fortunately bright colours have a greater force in dull climates."

But the lecturer deplored the want of accurate knowledge of colour combination. Study of the theory of colour would place a much-needed tool in the hands of the architect, the designer, and the decorator.

Colours were so much altered by the manner in which they were seen together, that it became essential for all users and sellers of coloured goods to acquire some knowledge of the theory of colour-production and colour-selection. They would then easily realise how to obtain the best advantage from colour, whether in securing the best combinations for wearing apparel, for the decoration of the home, or in the manner of presenting coloured goods in windows or show-rooms.

Bad contrasting pairs of colours were red and orange, blue and violet, green and blue; and the reason why these colours contrasted badly was that they were too closely related, being less thn 90 degrees apart in thae chromatic circle of 360 degrees.

—*The Daily Graphic.*

Mixed Colours.

According to a well-known architect, blue has a stimulating and life-giving effect, whereas green has just the opposite.

Exquisite tint, most lovesome blue,
Seen at thy best in cloudless skies,
Or in the yet more heavenly hue
Of my adored Amanda's eyes,
I fain would speak for thee a word or two.

Why should we say, forsooth, that he
Whose love is false, whose cash is spent,
Whom chill winds of adversity
Have left rheumatic, crippled, bent,
Is looking blue—the tint of ecstacy?

Science speaks true who saith that green
Best typifies all human woe.
Upon the landsman's face 'tis seen
When ocean winds do rudely blow
And o'er the rail his stricken frame doth lean.

Yet, when I think, I must confess
The champion's smitten orb displays
Cerulean unloveliness
And, upon chilly winter days,
Noses grow blue to beauty's sore distress.

While green is still the hue of spring,
Of innocence that is not "fly,"
And so, although I meant to sing
In praise of blue, it seems that I
Have made a shocking muddle of the thing!

TOUCHSTONE in the *Daily Mail.*

We ought to put blue papers on our walls, and avoid green as we would poison, if we follow the dictums enunciated by Mr. Goulburn Lovell, at a meeting of The Society of Architects.

This is a hard saying for householders, who know how difficult it is to get a really satisfactory shade of blue. There is practically only one—a rich dark peacock blue, not devoid of a tinge of green—and no other at all acceptable to the artistic eye.

Still, it must be done, because blue is " stimulating and health-giving," while green is the reverse. And yet, we should have said that a cool green was the most pleasing colour possible. Red is only a trifle less pernicious than green, and yet red seems to many the ideal of comfort and cosiness.

It should be noted that the lecturer based his conclusions on the effects of colours on plants and insects. As mankind is neither a plant nor an insect, there is still a loophole of scepticism left for those who love red papers and hate blue.—*Evening Standard.*

The statement by Mr. Goulburn Lovell that " blue is stimulating and health-giving," and therefore the ideal colour for house decoration, that green should be avoided as poison, and that red is only a little less objectionable, is not supported by scientific medical opinion.

An eminent doctor who has made a special study of the effect of colour and light on the human system gave some interesting facts to a *Standard* representative yesterday.

" Blue," he said, " acts on the senses as an anæsthetic and induces a melancholic and dreamy state. Those persons naturally prone to depression should never be surrounded by blue ; on the other hand, maniacal patients, or people with a very excitable nature benefit by being placed in blue rooms with a blue light. Different people are differently affected by colours which undoubtedly have a reflex action on the nervous system."

It is not only the bull that is excited by red ; that man may be also effected by this colour to a very extraordinary extent is plain from the experience that in photographic factories where work has to be carried on through red glass the intense nerve excitement and irritation produced amongst workers has necessitated a change to orange. In the same way small-pox patients treated in red rooms sometimes become excited and delirious.

Green is a good colour, because it is neither too stimulating nor too depressing, but an excess of green is apt to produce oppression.

" To sum up the colours," continued the doctor, " red gives force, sensitiveness, development, and growth ; blue is sedative ; golden-yellow aids intellectual and cerebral development, and gives tone to the brain ; green is restful, and yet possesses cheering elements ; violet calms moral troubles and nervous tension."

The practice of employing colours in the treatment of disease has been used in Italy for some time ; in America experiments have been made in the same direction, "and colour treatment will, I am convinced," said the doctor yesterday, "play a great part in medical science as time goes on." Red rays for curative purposes were used as far back as the 14th century by John of Gaddesden, a medical writer who died in 1361. He treated the son of Edward I. for small-pox by covering him with scarlet blankets and a red counterpane, placing him in a room with scarlet hangings, gargling his throat with mulberry wine, and making him suck the juice of pomegranates.—*The Standard.*

The Control of Architectural Design.

The Use of Line.

Several signs indicate that a proper architectural control over new London will soon be established. Lord Curzon's protest against our modern styles of building shows that the desire for such a control is becoming widely felt. Several interesting points were put before one of our representatives yesterday by a well-known member of The Society of Architects. "Line is what is most wanted at present," he said. "All streets look at any rate passable if they have harmony of line. I do not mean absolute uniformity, because this produces dulness. But no building ought to be put up so as to defy its neighbour's lines. There may be variety in detail, but the larger elements of construction which strike the eye should run together and blend. If this were done, difference of the colour facings would not so much matter. The popular reinforced concrete front would go next to a brick front under these circumstances.

"I believe that the secret of London's new ugliness lies in this neglect of line. Its cause is a very simple one. It is due to the mixing up of all the trades and businesses which now constitute commerce. If each trade or business was carried on in a single locality, it would be easy and natural to create harmonious streets. This is the secret why old London was really a fairly beautiful place, as far as any town can be beautiful. For one must remember that the general level of architectural beauty in a town—that is to say, the level in dwelling-houses and offices—must always be comparatively low. The highest architectural beauty is only to be found in special buildings at any time. But when all affiliated tradesmen lived close to one another, then the houses they worked in could be constructed, and were constructed, on more or less the same lines of convenience, with a resultant æsthetic harmony. If the eye got the effect of a street it would pass over the details of difference between individual houses and the bits of bad taste, which under any supervision will always endure. This effect is to be got from the use of line."—*The Standard.*

South African News.

There has been great turmoil in architectural circles over the report of the three assessors in the competition for the proposed residence of the Governor-General at Cape Town. The assessors were Mr. P. Eagle (Government Architect), Mr. W. H. Stucke (President Association of Transvaal Architects), and Mr. Herbert Baker (the well-known designer of the Union Buildings, Pretoria). Some thirty designs were submitted, and they are generally conceded to have reached a high level of excellence. The assessors' report, however, condemned the lot as not good enough, and only awarded premiums because they were bound to do so. The most stinging part of the report was that which characterized the whole of the architects competing as not having sufficient knowledge of great houses of this class; and when we remember that among the competitors are several men of very large experience in this very class of work, it will be seen why the report has been so bitterly resented. It is felt by onlookers and competitors alike that many of the competitors possessed more actual experience of this particular class of work than at least two of the assessors themselves, and some of them equal experience with the third assessor.

The prize was awarded to Mr. Douglas Hoets, who was employed for a considerable time in making designs for the same building when it was thought that the P.W. Department would carry it out. It appears that the Minister of Works had undertaken that his staffmen should not be allowed to compete, and this condition seems to have been violated.

At the time of writing, each architectural institute including your Branch, have nominated delegates to form a deputation to the Minister, who is willing to receive it. Messrs. Nicolay, Harris, and J. A. Moffat, are our Society's delegates. The lines to be followed by the deputation are not yet finally settled, but it is likely that the whole method of conducting Government Competitions will be reviewed, and better arrangements asked for the future.

The Minister has already refused a request by the Cape Institute to have the designs referred to another board of assessors, and he has warmly defended Mr. Eagle, whose appointment as assessor after he had prepared designs was criticized by the Natal Institute.

The designs themselves are in the main very beautifully executed, and the level in this respect is higher than ever. Most of the elevations follow the somewhat unconventional style of the old Dutch period at the Cape, with wavy gables and white walls, or else a sort of adaptation from Italian or Spanish villas and houses, skilfully adapted to suit the Cape, and the great natural architecture of the mountain behind the site.

Mr. Theophile Schaerer (Ecole des Beaux Arts), M.S.A. (allied with Mr. Gibson), secured the second premium.—E. H. WAUGH, M.S.A. Johannesburg, *Dec.* 3rd, 1913.

Meetings and other Fixtures, 1914.

Date.		Time.	Occasion.
Jan.	1st.	4 p.m.	Committees.
,,	14th.	5 ,,	Masonic Lodge, Holborn Restaurant, 5 p.m.
,,	15th.	4 ,,	Committees and Council.
,,	,,	8 ,,	Members' Meeting. Annual Report and Balance Sheet. Paper on "The Society and its Work," by the Secretary.
,,	29th.	4 ,,	Committees.
,,	31st.	6 ,,	Last day for depositing Quarterly Competition Drawings.
Feb.	4th.		Cinderella Dance, Connaught Rooms, 7 p.m. Tickets 5*s.* 6*d.* each, including light refreshments.
,,	12th.	4 ,,	Committees and Council.
,,	,,	8 ,,	Members' Meeting. Paper on "Buildings for Small Holdings," by Mr. A. A. Hunt (Member).
,,	25th.		Examination Entries Close.
,,	26th.	4 ,,	Committees.
March	11th.	5 ,,	Masonic Lodge, Holborn Restaurant, 5 p.m.
,,	12th.	4 ,,	Committees and Council.
,,	,,	8 ,,	Members' Meeting. Paper on "Bricks and Brickmaking," by Mr. A. E. Brown, B.Sc., London.
,,	26th.	4 ,,	Committees.
,,	31st.	10 a.m.	Graduateship and Membership Examinations.
,,	10th to 14th.		Easter Vacation.
April	16th.	4 p.m.	Committees and Council.
,,	,,	8 ,,	Members' Meeting. Paper on "The Arbitration Clause," by Mr. Valentine Ball, Barrister-at-Law.
,,	21st.		Annual Dinner, Hotel Cecil, 7 p.m. Tickets (exclusive of wines, etc.) 7*s.* 6*d.* each.
,,	30th.	4 ,,	Committees.
,,	,,	6 ,,	Last day for depositing Quarterly Competition Drawings.
May	1st.	6 ,,	Last day for depositing Travelling Studentship and President's Prize Drawings.
,,	14th.	,, ,,	Committees and Council.
,,	,,	8 ,,	Members' Meeting. Paper by Mr. G. Leslie Wilkinson, A.R.I.B.A,, on "The Expression of Form."
,,	30th.		Last day for depositing Scholarship Drawings.
,,	,, to June 2nd.		Whitsuntide Vacation.

Correspondence.

To the Editor of "The Journal of The Society of Architects."

Rural Labourer's Cottage for £120.

Sir,—The question of rural housing has loomed largely before the public recently, and this has given rise to much discussion on the practicability of erecting Rural Labourers' Cottages for £100. The majority of the correspondence has been both instructive and interesting, though, in some cases, the writers are evidently far more idealistic than practical.

The so-called "cheap" cottage is invariably far too small for ordinary requirements; its construction and fittings—or rather absence of fittings—leave much to be desired. The cost of repairs is heavy, and this amount tends to increase annually to an alarming extent.

An economical and efficient cottage can only be obtained by careful planning to meet the needs of intended occupiers, consideration being given to the requirements of decency, health and comfort. There should be very careful attention to details, and though designed strictly on utilitarian lines, in appearance it can and should be made both homely and attractive. Local materials should, as far as practicable be used for the building.

Sufficient attention is not generally given to the siting of the cottage so as to obtain the maximum amount of sunlight in every room. To this I attach the greatest importance, and think it ought to be made compulsory that every inhabited room should have sunlight.

The foregoing points have been embodied in the plan (copyright) of a pair of semi-detached labourers' cottages, as indicated on the attached sketch, which I have recently designed. The building is intended to be erected with 9 in. brick walls, the roof being covered with tiles or slates. The whole of the walls are well protected from the weather by overhanging eaves, especially the main front and back walls.

The accommodation provided is as follows:—

Living Room, 14 ft. 0 in. by 12 ft. 0 in. by 8 ft. 6 in. high, provided with a boarded floor and fitted with range and two cupboards. This room should face somewhat to the South of East so as to obtain the morning sun.

Larder, 5 ft. 6 in. by 2 ft. 6 in., fitted with shelves and having an external window.

Scullery, 8 ft. 9 in. by 6 ft. 6 in., fitted with copper, fireplace, sink with waste pipe and shelves. Ample space is provided for a small table, and mangle, or a portable bath.

E.C. and Coals, both are under the main roof, and approached externally by a paved path protected from the weather.

Bedrooms, three are provided on the upper floor and are so arranged as to get ample sunlight. Each contains a hanging cupboard, and a ventilator near the ceiling, and two of them have fireplaces. The ceilings are 8 ft. 0 in. high sloping to 7 ft. 0 in. at the front and back walls, and in two cases only to 5 ft. 3 in. at the end wall.

The cubical contents are 11,492 ft., which at 5*d.* per foot—£239 8*s.* 4*d.* or £119 14*s.* 2*d.* each cottage.

Many years experience in the designing, erection and maintenance of both cheap and expensive cottage property in practically every part of Great Britain has taught me that the cost of both building and maintenance varies greatly according to locality, as local conditions affect prices both of labour and materials. Under normal conditions, however, I consider this

pair of cottages could be erected for £240, and the financial aspect of so investing the money, not taking the land into consideration, would be as follows :—

A £120 Cottage let at 3*s.* per week, tenant paying rates and taxes, will give a net return of £5 11*s.* 0*d.*, $4\frac{5}{8}$% on outlay.

Rent	£0 3 0 per week	£7 16 0
Less sinking fund to produce £120 at end of 60 years @ 3%	0 14 9	
Repairs, Insurance and Supervision ..	1 10 3	
Allowance for empties	—	
		2 5 0
		£5 11 0 Net return.

If let at 2*s.* 6*d.* per week, the return would be at the rate of $3\frac{1}{2}$ per cent.

No doubt some among your readers are now trying to solve the problem of housing their labourers in such a way as to satisfy modern requirements in regard to health, comfort and sanitation, and at the same time to show a fair return for the capital invested, and to these the above information may be interesting.

T. Stewart Inglis, m.s.a.

London, *December 6th*, 1913.

The South African Registration Bill.

Sir,—Mr. Waugh's letter on this subject, in the November issue of the *Journal*, can hardly be intended to attract any comment in his own country. His views are well-known here, and have, so far, not proved acceptable to the majority of the profession in the Transvaal. His letter is possibly intended to influence the trend of the Registration movement in Great Britain. On that ground you will no doubt permit me to say that Mr. Waugh, the able and respected chief of the Johannesburg Municipal Architectural Department, has (in my opinion) voiced a one-sided opinion of a very wide question.

Here in the Transvaal Province of the Union of South Africa, we have had an Architect's Registration Act since 1909, and the profession in Great Britain would be well advised to profit by our experience—of what to avoid in such an Act. It is with the attempt of his Transvaal colleagues to profit by that experience, and their desire to remove the deficiencies of that Act whenever Parliament may extend the Registration principle to the whole of South Africa, that Mr. Waugh finds his quarrel.

South African architects are nearly all in favour of Registration. Those practising in the Transvaal have, however, grasped the shadow and missed the substance. They pay five guineas registration fee, and five guineas annual subscription to the Statutory "Association." The Association can elect a Council; the Council registers, and can deprive of registration for certain offences. Its funds have accumulated to one thousand pounds, and they must continue to accumulate, for nothing can be done—under the Act—save pay the cost of meetings and a Registrar's salary! Estate Agents, Building Societies, Builders, all continue to advertise, offering plans of buildings, etc.; and, although the title "Architect" is protected, anyone calling himself Civil Engineer, Structural Expert, etc., can carry out and draw fees for architectural work. Under the Act the Association may not, except under risk of being "surcharged" for any cost incurred, make any representations to the public or other authorities or to individuals in the general professional interest—and this at a time when the question is being agitated as to whether Municipal and Government buildings should be carried out by salaried departments. Our scale of fees not having been included in the Act proper, but brought in as byelaws, has been set aside by the Courts. When I add to this that there are 175 architects registered under that Act in this Province, irrespective of the numerous students, improvers, and assistants who do not need or desire to register; and that five attempts to obtain a reduction of the subscription have failed owing to the inelastic draughtmanship of the Act; your readers will commence to see that we have some grounds for dissatisfaction—even under Registration!

The "pure" form of Registration which we thus have in the Transvaal, and which Mr. Waugh would extend to the 450 architects resident in the Union of South Africa, is just so much taxation without corresponding privilege or powers of representation. Why the majority voice of a statutory Institute of Architects should be gagged by Statutory limitations, your readers can easily judge.

We in the Transvaal have learned that what is wanted is not so much the registration of architects, as the power to prevent unqualified persons earning fees for architectural work; further, that this and other injustices to architects will continue until wide Statutory powers are vested in a representative Institute of Architects.

I trust that Registration in Great Britain—when it comes—will be of a form more potent for the good of architecture than that which finds its nearest analogy in the conditions under which a cab-driver obtains and retains his licence!

Johannesburg, *November 27th*, 1913. M. J. Harris, m.s.a., *Past President, S.A. Branch.*

Reviews.

Building Supervision. By George W. Grey, P.A.S.I. Messrs. E. & F. N. Spon, Ltd. Price 2*s.* 6*d.* net.

The duties of an Architect, include careful supervision during erection of the buildings, which he has designed, and he will find that Mr. Grey gives in his book, separate chapters for the principal trades, with many valuable hints, on matters which occur in every day practice, and also makes interesting suggestions for the useful application of substitutes for timber in buildings.

The reader is reminded, that he may at times have to supervise on behalf of a Freeholder, or advise money advances on mortgage, and his attention is called to some of the pitfalls that await him.

In addition, the author defines the duties of Clerk of Works, and his responsibility to his employers, and deals with the precautions for prevention of dampness, dry rot, settlement, and other common defects, and the qualities of Portland cement, sand and concrete aggregates, with a special reference to reinforced concrete.

Paint and Painting Defects: Their Detection, Cause and Cure. By J. Cruickshank Smith, B.Sc., F.C.S., being book No. 9 of "The Decorator" series of practical books. Edited by Mr. Arthur Seymour Jennings, and published at 3*s.* 6*d.* by the Trade Papers Publishing Co., of 365, Birkbeck Bank Chambers, W.C.

With an expert like Mr. J. Cruickshank Smith to write an explanatory book on *Paint and Painting Defects*, the production was bound to be good and as correct as need be.

Whether it is that the painting of a building is the last work to be done, and the early enthusiasm of the Architect has waned, it may truthfully be said that Architects as a body do not know much about the paints they specify, nor how they should be applied. Old stock phrases appear and re-appear in Specifications, their meaning almost lost in antiquity.

The following extract from the book is worth noting :—

"Patent driers frequently contain in their pigmentary portion as much as 95 per cent. of absolutely inert and valueless material, usually barytes or Paris white or a mixture of the two. It is, therefore, absurd for a paint user to specify that a certain paint shall consist of pure white lead, pure linseed oil and pure turpentine, if at the same time he permits the introduction of an arbitrary proportion of patent driers of unknown composition."

The small book contains no padding. It is concise and explanatory, and being arranged in alphabetical sections, reference is easy. It is to be noted that the author makes very slight reference to linseed oil, and that the chemical side of paint making is touched upon with a very light hand.

Reinforced Concrete Bridges. By Frederick Rings, M.S.A., M.C.I., C.E. London: Constable and Co., Ltd., 1913. pp. 181. Cloth. 4to. 11¼ in. by 7¾ in. by ⅝ in. Price 21*s.* net.

The author's previous work on Reinforced Concrete dealt with the subject in a general manner and on purely elementary lines; the present work deals more fully with a single branch. He adopts the standard notation of the Concrete Institute of which he gives a list at the commencement. This is a great advantage in any work, as the formulæ are then more easily compared with those in other works, the only drawback being the number of subscripts which make it very troublesome for the printer. He rightly calls attention to this mode of construction for bridges as having many advantages, but we do not agree with him that it is peculiarly adapted for girder bridges. In our opinion this form is only suitable for small spans, while for large spans it is especially suitable from its ability to provide tensile resistance in an arch subject to rolling loads. He emphasizes the fact that reinforced concrete requires the most scrupulous workmanship and supervision, the majority of the failures being attributable to neglect in this respect. The "Reinforced Concrete Regulations for the County of London" quoted by the author are taken from the draft submitted by the London County Council to the Local Government Board, and it is to be hoped that they will not pass into law without some further amendment. They are still under consideration by the Concrete Institute and other bodies, and although the general form and character will undoubtedly remain the same there are several details that require modification. The author gives many practical hints as to the foundations and centering of bridges. He says the timber should not be stressed to more than 400 lbs./in.^{2} in the direction of the fibre and 170 lbs./in.^{2} at right angles to the fibre. If exposed to direct bending, timber should not be stressed to more than 700 lbs./in.^{2} He, however, falls into an error in his definition of stresses and strains. Stresses are the forces called into play by the load and strains are the deformations caused by the stresses. He is wrong also in his definition of the modulus of elasticity, it is not the force which will extend a bar one inch square to an extent equal to its own length, as that is an impossibility, although founded upon a true theory; it is really the stress-strain modulus, or the stress divided by the strain within the elastic limit. Also with regard to the bending moment under section C, p. 24, at centre of partially distributed load on a cantilever, it has nothing to do with y, the distance from support, but is $\frac{wz}{2} \times \frac{z}{4} = \frac{wz^2}{8}$ One would suspect errors in the more complicated formula that follow, but we are not concerned to discover all the errors in the book. The information as to live loads on bridges is rather crude, and the statement that the usual practice for railway bridges is to consider the train as a uniformly distributed load of one-ton per foot is not correct. The author does not appear to be clear in his own mind as to "temperature stresses," he says on p. 34, "the reinforcements to counteract these stresses should be placed as close to the surface as possible," and six lines lower down he recommends "ample concrete covering given to the reinforcing rods."

The most useful part of the book consists of examples of bridges actually constructed, some of which are particularly interesting. The details of the reinforcement being given, the engineer can study the various forms at leisure and compare the good points of each. In some cases the centering used is also given. The author is by no means clear in his description of the theory of the arch; he says, "an arch always creates a push against its abutments, and the bending is in two directions. This being the case, the inner or resisting forces at any section of the arch are of two kinds—being a single force which always acts, viz., the horizontal thrust, and a couple which resists the bending similar to the couple acting in a beam. These forces acting at any section can be reduced to a single force."

These points can be improved in the next edition, as there is sufficient valuable matter to cause a good sale.

The book concludes with some useful tables and memoranda.

Residential School Competition, Glake Hall.

Members of The Society of Architects are advised that the conditions of the above Competition are at present unsatisfactory in certain respects, and that they should not take any part therein under the present conditions.

R.S.I. Congress, Blackpool, 1914.

The Council have accepted an invitation from the Royal Sanitary Institute to appoint Delegates to the Congress at Blackpool next July. The representatives of the Society will be Prof. Henry Adams, M.INST.C.E., Hon. Librarian (London), and Mr. F. H. Gorst (Blackpool).

Chairmen of Committees.

The Members of the Standing Committees have made the following appointments to the Chair. ART AND LITERATURE—Thos. Wallis. EXAMINATION—Prof. Henry Adams, M.INST.C.E. PRACTICE—George H. Paine; *Vice-Chairman*—A. Alban H. Scott. FINANCE—E. J. Partridge. REGISTRATION—George E. Bond.

Government Architecture.

A commission of architects has been nominated in connection with the designs for new public buildings at Ottawa. The *Montreal Star* takes the occasion to make caustic comment upon " Government architecture " in the Dominion. So far as a cursory examination goes, it declares, the " only thing to be said in favour of the designs for post offices, customs houses, and drill sheds with which the taxpayers have long been afflicted is that we ought to be accustomed to them by this time. Apparently the fundamental principle on which this idea of a universal type of public building was evolved had been that any post office should be the equivalent in discomfort and inconvenience to all post offices, and that drill halls should be a blot on and a disfiguration to a neighbourhood in order to symbolize the horrors of war. Incidentally, the system has greatly lightened the work of the officials, whose duty would otherwise have been to prepare designs for public buildings with some regard to their respective environments. If a post office was wanted the rubber stamps with which all post offices were designed were available at a moment's notice, and all that was necessary was to fill in the specifications as to size by multiplying or dividing by the proper increment of population." The Minister of Public Works who first recognizes and gives effect to the idea that the Government is responsible, morally and mentally, as well as financially, for the effect of its architecture, adds the journal, will deserve well of his countrymen.—*Daily Telegraph.*

Registration of Architects and Fees.

We are glad to learn that a draft bill has at last been drawn up for the registration of architects; but whether it will pass the House is much doubted, even by its drafters. Its weakness lies in the possibility of its giving a legal status to a great many who are not really architects but practise as such, and therefore could not be excluded from the scope of the bill. At present these persons have no defined status, whatever they may choose to call themselves. This is an evil which we fear will have to be faced, and architects must be contented with such benefits as the bill will confer in future.. It ought, if worthy of its name, to be able to prevent any more unqualified men from joining the ranks,and this will at once raise the status of the profession, which will continue to improve as the few unqualified in it continue to disappear by the efflux of time. We trust that fears of the fate of the bill will not be realized, but that it will duly pass. Another matter for congratulation is that a revised scale of fees has also been drawn up and will be put into force as soon as it has been approved by the general body of the Royal Institute. We trust that in preparing this scale the interests of the juniors has not been lost sight of.—*Indian Engineering.*

The Beaux Arts Atelier.

The criticisms on the drawings submitted in the November Competitions drew a full house at the Atelier, on December 3rd. Mr. H. V. Lanchester, F.R.I.B.A., was in his happiest vein in criticising the designs for "A Tea Pavilion and Boat-house on a Lake," and "A Vestibule to a large Municipal Building," and the Patron, Mr. Arthur Davis, dissected the drawings for "Public Baths" in a manner calculated to convey much useful information.

The following were the awards:—Public Baths, WILFRED HAYLE (Mention). Tea Pavilion and Boat-house on a Lake, W. G. NEWTON, M.A., A.R.I.B.A. (First). A Vestibule to a large Municipal Building, L. H. BUCKNELL, A.R.I.B.A. (Mention). R. LOWRY (Mention).

Amongst those present were the Chairman of Committee, Lord Saye and Sele, Earl Beauchamp, H.M. First Commissioner of Works, Sir Brumwell Thomas, and other well-known supporters of the Beaux Arts movement, besides other gentlemen associated with the sister arts and sciences of sculpture and building.

Several of the visitors present were sufficiently satisfied with what they saw to offer themselves as Honorary Members of the Atelier as evidence of their practical sympathy with the scheme.

The next Exhibition will be held at the Atelier on the evening of January 14th, when it is hoped that Field Marshal the Rt. Hon. Lord Methuen, who has recently joined the Beaux Arts Committee, will be present.

The Institute and The Society of Architects.

We have frequently heard of the suggestion which has been made to the effect that The Society of Architects and the Royal Institute of British Architects might divide functions, the one representing the practical and the other the artistic side of architecture. We hold that such a divorce of functions would be a mistake, as when an architect joins a professional society it is with a view to associating with a body which represents and covers the whole of his professional activities. Any limitation of functions must in the end tend to the atrophy of some parts and the overgrowth of others, producing an unhealthy state in the whole body. A body which represented the æsthetic side of architecture alone would be discounted by Government, and would, in the long run, tend to be looked at as a more or less antiquarian and dilettante association, while a society representing the utilitarian side alone would be classed as a trade association. Architects will be held in greater esteem by the public in proportion as the latter have cause to see that they are alive to the whole range of their opportunities and duties, and the division of function is not the way to encourage such a conception. We have already expressed our regret that the movement for the amalgamation of The Society of Architects with the R.I.B.A. did not actually fructify, but we hope that in the fulness of time wise counsels will prevail, and that we shall have but one great body with allied societies representing architecture throughout the dominions of the Empire.—*The Builder*.

Nottingham and Derby Architectural Society.

The Mayor of Nottingham, Councillor Ball, who is an architect, entertained the N. and D.A.S. to dinner, at the Guildhall, on December 19th. The Society of Architects was officially represented by the President and the Secretary.

Mr. Ernest Sutton, F.R.I.B.A., the President of the N. and D.A.S., was not happy in his reply on behalf of that body, and his feeble advocacy of the Institute's Registration policy, coupled with his apology for the absence of any of their official representatives, left his audience cold.

Mr. Harry Gill, M.S.A., the Vice-President, is likely to find himself the centre of a Gilbertian situation very shortly. He is next on the rota for the Chair, and the rules provide we understand, that the President must be an F.R.I.B.A. as the office carries with it the right to represent the Society on the Council of the Institute. We may remark *en passant* that this privilege is a question of numerical strength, which has been maintained by the absorption of the Derby Society; a "political" move which is not altogether acceptable to some who deprecate the loss of identity by the Nottingham Society, which recently celebrated its Jubilee.

The Journal.

A South African member writes: "The *Journal* comes to hand regularly; what a tip-top little publication it is."

Year Book.

We have to depend upon the kindness of Members in notifying us of any errors and omissions affecting the reference to them in the *Year Book*. One such omission has been brought to our notice. Mr. M. Alton Bazeley, of Plymouth, is a Past-President of the Devon and Exeter Architectural Society, and should have been so described.

Professional Defence Fund.

The attention of Members is directed to the facilities afforded by the Society in giving advice on professional points of practice, and to the existance of a Defence Fund, available in cases where the Council are advised that they would be justified in taking up or assisting a Member in contesting a case involving a question of principle affecting the profession generally. Members who wish to place a case before the Committee should communicate with the Secretary.

Competition for Proposed Concrete Cottages.

The proprietors of "Concrete and Constructional Engineering" invite architects, surveyors and their assistants, residing in the British Empire, to compete in the preparation of the design of a suitable Detached or Semi-detached Labourer's Cottage, largely or mainly of concrete, to be erected in sets of six in the Home Counties of England (at least 30 miles from Charing Cross) at a prime cost to the owners of £125 per cottage.

The Proprietors offer the following Premiums:—First Prize, One Hundred Guineas; Second Prize, Fifty Guineas; Third Prize, Twenty-five Guineas; Fourth and Fifth Prizes, Ten Guineas each.

The Assessors (whose decision as to the competition is final) will be: Max Clarke F.R.I.B.A.; Professor A. Beresford Pite, F.R.I.B.A.; Edwin O. Sachs, F.R.S.ED., M.S.A.

The Competitive Designs must be delivered not later than May 15th, 1914, Noon, at the offices of "Concrete and Constructional Engineering" (but not earlier than May 1st).

The conditions of the competition will be found in the January issue of "Concrete and Constructional Engineering," obtainable on application in writing with remittance of 1/3, from the Publisher of "Concrete and Constructional Engineering," North British and Mercantile Building, Waterloo Place, Pall Mall, London, S.W.

Mainly about Members.

It is with great regret that we record the death on December 3rd, following an operation, of T. WALTER L. EMDEN, a Past President of the Society, of which he had been a Member since 1887. He served on the Council for many years, and was President for four years in succession.

Mr. Emden devoted a great deal of time to forwarding the Society's interests, and he attended and spoke at many Registration meetings in various parts of the Kingdom. He was also keenly interested in the Society's endeavour to obtain an amendment in the law relating to Ancient Lights, and was instrumental in securing a hearing from the Lord Chancellor to a memorial presented by a deputation from the Society calling attention to the need for fresh legislation.

The late President was on the Society's Retired List at the time of his death, and it was characteristic of him that some years ago he handed over his practice to his Staff. He was the architect of many public buildings, chiefly theatres and hotels, in London and the Provinces.

Mr. Emden took an active part in public affairs, and had been Chairman of the Strand District B.O.W., and of the Corporate Property Committee of the L.C.C., Mayor of Westminster, and three times Mayor of Dover.

He was a J.P. of the County of London, a Chevalier of the Legion d'Honneur, and recipient of other honours, including a presentation of plate from the Westminster City Council, and the placing of his portrait in the Council Chamber, the freedom of Dover, and the Gold Medal of the Society. In politics, Mr. Emden was a Conservative, and had been a member of the Council of the Primrose League ; he was known in Masonic circles as a P.M. of Lodges 1261 and 29, and was a Member of the Constitutional, Bath and Royal Aero Clubs. He was a generous benefactor to the Architects' Benevolent Society, and he founded and endowed the Walter Emden Scholarship in the Cancer Research Laboratory of the Middlesex Hospital.

Like all strong men of decided views, Mr. Emden did not go out of his way to conciliate those who differred from him, and he was not liked by everybody, but in reality he was one of the kindest and most considerate of men, doing much good in an unobtrusive way, and there will be many to whom his death will mean the loss of a real friend.

Mr. Emden was laid to rest on December 5th, at St. Margaret, at Cliffe near to his beautiful home at St. Margaret's Bay, where years ago he entertained the Society. The Secretary was amongst the representatives of public bodies who paid their last personal tribute of respect to his memory.

Lantern for Sale.

The Society has for disposal a Lantern in fair condition with an 11 in. lens and some accessories. Can be seen and tested at the Society's premises.

Architectural Practice for Disposal.

The Secretary has information of an established architectural practice for disposal. South Coast. The intending purchaser should be a first-rate man of considerable experience.

Cinderella Dance.

Arrangements are in hand for holding a Cinderella Dance at the Connaught Rooms, Great Queen Street, W.C., on Wednesday, February 4th, 1914. Tickets, 5s. 6d. each, including light refreshments, may be obtained from the Secretary. Members may introduce friends.

The Membership.

The resignations of the following have been tendered to and accepted by the Council :—HORACE DAN, Rainham ; GEO. RATCLIFFE, London ; A. THRIPPLETON, London ; and FRANK WINDSOR, Croydon. *Members.*

P. BLINMANN, Bristol ; C. W. BROWN, London ; I. HOPKINS, Swansea ; A. J. HOWES, London ; H. G. MANN, London ; and H. G. WILLIAMS, Montreal. *Students.*

The following whose elections were declared void, have been reinstated to Membership :—P. R. COOKE, Germiston, Transvaal ; W. H. GIBSON, Johannesburg.

Annual General Meeting.

The Annual General Meeting of The Society of Architects for the Session 1913-14, will be held at 28, Bedford Square, London, W.C., on Thursday, January 15th, at 8 p.m.

Agenda :—

1. Minutes.
2. Nominations and Announcements.
3. To Receive the Council's Annual Report.*
4. ,, Receive the Auditors' Report and Statement of Accounts.
5. ,, Appoint the Auditors.
6. Votes of thanks.
7. Some Notes on the Society's work from its inception to the present day.

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* Copies may be obtained in advance from the Secretary.

THE
Journal
OF
The Society of Architects
FOUNDED 1884. INCORPORATED 1893.

Including Transactions and Architectural Notes.

No. 76. Vol. VII. FEBRUARY, 1914. [New Series.

The Society is not, as a body, responsible for the opinions expressed by individual authors and speakers.

Fiascos.

The R.I.B.A. have decided not to proceed with a Registration Bill at present, but to apply for a new Charter. This is not to say that they have necessarily abandoned Statutory Registration or even shelved it indefinitely, but that they were bound by the opinion of their advisers which was to the effect that owing to Parliamentary difficulties on the one hand, and constitutional difficulties within the Institute on the other, it was impossible to successfully promote legislation within that body at the present time. The decision referred to was arrived at by a vote of the majority of the members present and voting at a meeting on January 5th, but as that gathering did not include more than a fraction of the membership claimed by the Institute, the result does not in our opinion necessarily represent the voice of the general body of the members, particularly those in the provinces, on this question.

It may be noted that on two occasions within the last few years, the Council of the Institute have found themselves committed to a policy which they were afterwards advised they had no power to carry out. One was in connection with their proposal to enter into an agreement for amalgamation with the Society, and the other in regard to their recent Registration scheme.

It is to be hoped that whatever the scope of the proposals for a new Charter may be, its limits when granted may be so clearly defined as to obviate the necessity for the Council to waste their time and that of other people on schemes which afterwards prove to be beyond the powers of the Institute to carry into effect.

Proceedings.

The Annual General Meeting of The Society of Architects was held at 28, Bedford Square, London, W.C., on Thursday, January 15th, 1914, at 8 p.m.

Mr. Percy B. Tubbs, F.R.I.B.A., President, having taken the Chair, it was resolved that the Minutes of the last Annual General Meeting, having been printed in the *Journal*, be taken as read and that they be confirmed and signed.

Five nominations for Membership were announced, and a ballot was taken for the election of the following Candidates for Membership, and was declared to be unanimously in their favour :—

Holmes. Arthur Herbert,	Manor Park, Aylesbury, Bucks.
Isaac. William John,	72, Bewsey Street, Warrington.
Knight, John,	5, Cross Street, Manchester.
Nangle. James, F.I.A.,	84, Elizabeth Street, Sydney, N.S.W.
Price. William Joseph,	Vernon House, Bloomsbury Square, W.C.
Smith. Albert,	65, Khedive Road, Forest Gate, E.

It was announced that Mr. S. T. T. James, a former member, who resigned in 1899, had been reinstated by the Council on complying with their requirements.

The Council's Annual Report for the year ended October 31st, 1913, was read by the Secretary, and after debate was, on the proposition of Mr. H. Freyberg, F.S.I., seconded by Mr. Cover, unanimously adopted.

The report of the Hon. Auditor (Mr. Ellis Marsland), was read in his unavoidable absence, by the Secretary, who also dealt with one or two questions raised, and presented the Revenue Account and Balance Sheet. The Auditors' report and Balance Sheet were then unanimously adopted.

The professional Auditors, Messrs. Bolton, Pitt & Breden, were unanimously re-elected on the present terms, on the proposition of Mr. J. Herbert Pearson, seconded by Mr. R. Geo. Bare.

Mr. Pitt in thanking the members for re-electing his firm, congratulated the Society on its sound financial position.

Votes of thanks were then accorded to the retiring Hon. Officers and Members of Council, the other Honorary Officers, the Honorary Auditor, the Honorary Solicitor, and the Secretary and Staff.

The Secretary, Mr. C. McArthur Butler, F.C.I.S., briefly returned thanks on behalf of the Staff. He then read a paper on " The Work of the Society from 1884 to 1914,"* and a discussion ensued in which Mr. E. J. Kibblewhite, Mr. H. Branch and other founders took part.

A vote of thanks was accorded to the Secretary, and the proceedings terminated.

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*Owing to pressure on our limited space, the publication of this paper is deferred.—*Ed.*

Report of the Council

For the Year Ended October 31st, 1913.

At their first Meeting, your Council appointed the following Standing Committees and Boards, to assist them in dealing with the work of the Society :—

Art and Literature, Examination, General Purposes, Finance, Practice, Parliamentary, Registration Sub-Committee, Board of Examiners, Board of Professional Defence.

The Board of Professional Defence is an advisory Committee formed to assisting your Council in dealing with cases in which Members are personally concerned, involving matters beyond the scope of the Practice Committee, and embracing questions of principle affecting the profession generally. It is perhaps a matter for congratulation that the necessity for calling this Committee together has not arisen during the past Session ; but its existence, together with that of the nucleus of a substantial defence fund may be taken as an earnest of your Council's desire that the services and resources of the Society shall be made available to the utmost reasonable extent for the benefit of the Members and, through them, of the profession.

The Council have met thirteen times, and there have been forty-three meetings of the Standing Committees, and eighteen of Sub-Committees, a total of seventy-four meetings of the Council and Committees during the year.

A schedule of attendances at these meetings was distributed to the Members with the House List.

Local Honorary Secretaries.—Your Council appointed Local Honorary Secretaries in various centres in the districts of the United Kingdom and abroad, as set out below.

England.—Bedfordshire, Cheshire, Cornwall, Derbyshire, Devonshire, Dorsetshire, Durham, Gloucestershire, Hampshire, Herefordshire, Hertfordshire, Kent, Lancashire, Leicestershire, Northants, Northumberland, Nottinghamshire, Oxfordshire, Shropshire, Somersetshire, Staffordshire, Surrey, Warwickshire, Yorkshire.

Ireland.—Cork, Dublin.

Wales.—Cardiganshire, Denbighshire, Glamorganshire, Monmouthshire, Montgomeryshire.

Abroad.—Argentine Republic, British East Africa, Australia, British Columbia, Canada, China, India, New Zealand, South Africa and Tasmania.

These appointments are made annually, and in order to distribute the work as much as possible, and to avoid unduly overloading any one member, changes in the personnel are made from time to time. The thanks of your Council are due and are hereby accorded to those members who have undertaken these duties during the past year.

The Membership.—Ninety-four Candidates have been elected to Membership by ballot of the Members, and two Graduates and twelve Students have been admitted by the Council to the respective Registers. After allowing for deaths, resignations, voids, lapses, and removals, the total Membership on October 31st is eleven hundred and eighty-five, of which number nine hundred and sixty are corporate members.

The operation of the revised Articles of Association has had the effect anticipated by your Council, of weeding out, particularly in the Students' Class. Your Council is of opinion that a Student or Graduate of the Society who does not attempt to qualify himself for a higher grade within a reasonable time, is not availing himself of the opportunities afforded him to an extent sufficient to warrant his remaining on the Register of the Society. In cases where corporate members have ignored their responsibilities to the Society, and have paid no attention to communications on the subject, your Council have allowed their memberships to lapse, as being unprofitable to the Society. Your Council have on the other hand given to certain other members at their request such consideration as the circumstances justified them in doing.

The Society has sustained a loss by the death of the following Members :—

ARTHUR HUNTLEY, London ; PERCY RICHARD BRADFORD, London ; HENRY MOON, Godalming ; HENRY FAWCETT CRAWFORD, Enniskillen ; THOMAS EGBERT LIDIARD JAMES, London ; WILLIAM JOHN OLIVER, Wolverhampton ; GEORGE THOMAS HOWELL, London ; ORLANDO BAKER, Hobart ; JOHN BOOTHROYD CORBY (Member of Council), Stamford ; THOMAS DOWSON, Whitby ; ARTHUR LINCOLN COX, Minehead ; WALTER W. THOMAS (Past President), Liverpool.

The Examinations.—The last of the Membership Entrance Examinations under the old syllabus was held in March. The new regulations and the enlarged syllabus then came into force. Arrangements were made for Candidates who had been previously relegated, to have an opportunity of endeavouring to complete their qualifications under the old syllabus. The extension and stiffening of the examination syllabus has had the effect of impressing upon candidates the necessity for careful preparation before attempting the examination. The new syllabus covers a wider range of subjects than hitherto ; at the same time, by giving a choice of certain optional subjects, some elasticity is secured to meet the tendency to specialize without sacrificing the essential requirements necessary to test a candidate's general knowledge.

The first examination for admission to the Register of Graduates was held in October last, in London. The Membership Examinations were held in London, Leeds, Manchester, Cardiff, Oxford, Birmingham, and Dublin, at Easter and in October, under the supervision of the Local Secretaries and other Members.

Seventy-two candidates were admitted to the Membership Examinations, and the following table shows the result in the various subjects taken:

MEMBERSHIP EXAMINATION.

SUBJECT.	Examined.	Passed.	Relegated.
1. Design	28	13	15
2. History	19	16	3
3. Construction and Materials	28	11	17
4. Shoring and Underpinning	2	1	1
5. House Drainage, &c.	31	18	13
6. Specifications and Contracts	31	22	9
7. Mechanics	2	1	1
One of the following subjects must also be taken.			
8. Easements and Dilapidations, &c.	1	1	—
9. Quantities and Prices	41	27	14
10. Surveying and Levelling	—	—	—
11. Setting out, etc.	—	—	—
12. Monumental Design	—	—	—

GRADUATESHIP EXAMINATION.

1. English Composition	2	2	—
2. Architectural Design	2	2	—

The result shows that in nearly every subject taken, a very large percentage of the candidates were relegated to their studies.

Professional Practice and Ethics.—The Practice Committee have had before them at almost every meeting requests for advice on points of practice or in relation to professional etiquette. In these matters your Council have the advantage of the advice of the Society's Honorary Solicitor on any legal points which may be involved. The Code of Ethics drawn up by your Council as a result of a paper read before the Society by the Secretary, has been published in the *Journal*, and in the *Year Book*, and is a standing guide on matters of professional etiquette. Its scope extends far beyond the nine clauses embodying certain well defined and accepted principles, and the Code has been found extremely useful in practice, and of considerable assistance in enabling a Member, for instance, to show that in adhering to recognized professional etiquette, he is not only acting in accordance with his own sense of the fitness of things, but that he is supported in his view by the Society to which he belongs. The knowledge that the Society has adopted certain principles of this kind, and that it is prepared to and does enforce them when necessary, has been taken advantage of by Members when dealing with persons or public bodies who have the vaguest idea of an architect's responsibilities to himself and to his profession.

Several cases of alleged infringement of the Code by Members have been brought to the notice of your Council, and where necessary the Members concerned have been given the option of coming into line or withdrawing from the Society.

CODE OF ETHICS.

The following Clauses are issued only as a guide and must not be construed as a denial of the existence of others equally important. The several items indicate offences of varying degrees of gravity and suggest that their infringement, or any other breach of professional etiquette, will be dealt with accordingly by the Council under the powers conferred upon them under the Articles of Association.

(1) He should act in his professional relations with his Clients in a fiduciary manner and his charges to such Clients should be based upon the schedule of charges adopted by the Society. The fee paid by the Clients should constitute his only remuneration for such work, except as provided under Clause 8.

(2) He should not while acting in a professional capacity have any interest financial or otherwise in any of the building trades or in any firm or business with which he may have occasion to deal on behalf of his Clients, without disclosing the fact to such Clients.

(3) He should not advertise for or otherwise improperly solicit professional work.

(4) He should not participate in any open Architectural Competition the conditions of which are not in accordance with the regulations approved by the Society, nor should he participate in any local or limited Architectural competitions to which exception is taken by the local Architectural Societies or by a majority of the eligible competitors.

(5) He should not be the medium of any payment made on behalf of his Clients except by their special request. He should only issue Certificates or recommendations for payment by his Clients.

(6) He should not attempt to supplant a fellow Architect after definite steps have been taken towards his employment.

(7) He should not compete for employment on the basis of professional charges.

(8) He should not receive, directly or indirectly, any royalty, gratuity or commission on any article or process used on the work which he is carrying out for his Clients unless and until such royalty, gratuity or commission has been authorized in writing by his Clients.

(9) He should not anonymously criticize in public print the professional work or conduct of another Architect, except when acting in an editorial capacity.

The Society is frequently applied to by Members for forms of contract and other professional documents, and with requests that the Society shall publish their own forms. Your Council consider it inadvisable to have, for instance, duplicate and possible conflicting Scales of Charges, and that it would be very much better from the point of view of professional unity if the documents now issued by the R.I.B.A., and adopted by the Society could be issued also by the Society. Your Council approached the Institute some time ago with a suggestion that the Schedule of Charges and Competition Regulations which had been adopted by the Society in principle for many years, might be published in the Society's *Year Book*. A courteous intimation was received from the Institute to the effect that they would welcome the publicity thus given to these documents. A further suggestion to the Institute that this principle might be extended by the issue of joint standard documents, common to both bodies, was not favourably received, and your Council, while still holding the opinion previously expressed, have adopted the principle of issuing standard documents for the use of the Society's Members, and have referred the matter to a Sub-Committee for consideration and report.

Architects' Benevolent Society.—Your Society is permanently represented on the governing body of the Benevolent Society, and your Council acknowledges with gratitude the generous way in which Past Members of the Society, and in some cases, other applicants recommended by them have been dealt with by the Committee. Substantial relief has been granted from the limited resources of the Benevolent Society, and it is earnestly hoped that every Member who does not already subscribe will become a supporter. Your Council feel convinced that they would do so were they able from personal observation, as is the case of their representative, to realize the urgent calls upon the Committee's resources.

Junior Section.—The alteration in the Articles of Association and the introduction of a new Class of Graduates, did away with the necessity for a Students' Committee, the Members of which have formed themselves into a Club, which is open to all Graduates and Students of the Society without fee. Your Council have granted them the use of the Society's Headquarters for periodical meetings, and during the past Session several successful social functions have been held.

The following table shows the result of the Competitions offered to Students during the past Session :—

TITLE.	Date.	Max. Age limit.	SUBJECT.	Value.	No. of Entries.	ASSESSOR.	WINNER.
Quarterly Competition	Jan. 31	23	A Cottage Hospital	£3 3*s.*	4	Edward J. Partridge, F.S.I.	A. L. Abbott, London
Quarterly Competition	Apl. 30	,,	The Training of an Architect	£3 3*s.*	—	Percy B. Tubbs, F.R.I.B.A.	No Entries.
Travelling Studentship	May 1	28	A Group of Alms Houses	£25 and Silver Medal	8	E. C. P. Monson, F.R.I.B.A.	A. L. Abbott, London.
Quarterly Competition	July 31	23	Architectural Sketches	£3 3*s.*	1	Col. F. S. Leslie G. A. T. Middleton, A.R.I.B.A.	No Award.
Architectural Scholarship	Sept. 30	28	Measured Drawings and Sketches	£10.	1	do. do.	F. M. Cashmore, London.
Quarterly Competition	Oct. 31	23	Measured Drawings and Details	£3 3*s.*	—	do. do.	No Entries.

Your Council have since adopted the principle of appointing a Jury of not less than three Assessors in every Competition, to draw up the conditions and to adjudicate upon the work received. The designs are then thrown open to the criticisms of the professional Journals, and the inspection of anyone else interested.

Articles of Association.—The revisions to the Articles of Association were confirmed by the Members early in the Session, and came at once into operation. Their beneficial effect has already been felt both in the details of the internal administration of the Society's domestic affairs, and in the generally improved tone which they have imparted to the Society's status. They have been directly responsible for a decrease in the Membership of the Junior Section for the moment, for reasons given elsewhere. Another effect which they have had is to enable your Council to present a complete Annual Report, together with the Balance Sheet, at the Annual General Meeting, and to give Members an opportunity of considering it in advance.

Representation.—Your Council, on the invitation of the Organizers, appointed official delegates to represent the Society at the following Conferences. In several cases a great deal of good was done by Members expressing their views at such meetings, and by subsequently reporting to your Council, in some cases making suggestions regarding points which the Society might usefully consider.

Royal Sanitary Institute Congress, Exeter, July 7th to 12th—PROFESSOR HENRY ADAMS, M.INST.,C.E., MR. WM. H. MAY, and MR. CHAS. COLE, Local Hon. Secretary, Exeter.

National Housing and Town Planning Conferences, Brighton, May 23rd and 24th—MR. E. J. HAMILTON, Local Hon. Secretary; MR. SAMUEL DENMAN; and MR. THOS. GARRETT. London, May 27th and 28th—MR. PERCY B. TUBBS, F.R.I.B.A., President; COL. F. S. LESLIE, R.E., Hon. Secretary; and MR. A. ALBAN H. SCOTT, M.R.SAN.INST. Liverpool, May 29th and 30th—MR. R. CECIL DAVIES, Local Hon. Secretary; MR. T. G. WILLIAMS; and MR. W. S. ELLISON. Bradford, June 19th and 20th—MR. S. ROBINSON, Local Hon. Secretary; MR. J. JACKSON; and MR. H. E. PRIESTLEY.

Your President has also represented the Society at a number of Banquets and other social gatherings of kindred bodies.

The attention of your Council is drawn from time to time to the desirability of the Society being represented on specified bodies interested directly or indirectly in Architecture, it being usually assumed that the Society has been overlooked if its name is not on the prospectus. Your Council point out that such matters fall into two categories; the first, where it is essential that the Architectural profession, but not necessarily the Society, should be represented; and the other where it would serve a useful purpose for the Society to be represented. Your Council are fully alive to the advantage of the latter course whenever possible, but they also think it proper under certain circumstances to support the work of such bodies, even if the Society is not directly represented thereon.

Unsatisfactory Competitions.—Your Council has continued its policy of taking action when necessary and possible, preferably in conjunction with other Architectural bodies, by calling the attention of promoters to unsatisfactory Competition conditions, and by requesting the Members of the Society not to compete until the necessary amendments have been made. It is a matter of common knowledge that one Member who took part as Assessor in a Competition which had been barred by the Society, was called to account and his explanation published in the *Journal.*

Recognition by Public Bodies.—The attention of your Council was drawn on two occasions to the action of public bodies in proposing to limit Candidates for Architectural appointments to Members of one Institution. In each case your Council were successful in protecting the interests of the Members of the Society by getting the restriction removed, and it is interesting to note that Members of the Society were on the selected short list ; in one case a Member was one of the two selected for the appointment.

Sessional Meetings.—The response to the invitation sent out by your Council to Members, inviting them to offer papers or suggest subjects for discussion, did not produce much effect. Your Council, however, had no difficulty in filling the list, and the following papers were read, and lectures given during the Session :—

1912.			
Nov.	16th.	The President's Address.	Percy B. Tubbs, F.R.I.B.A.
Dec.	12th.	"Salisbury Cathedral."	E. W. Harvey Piper (Hon. Member).
1913.			
Jan.	16th.	"The Influence of Sanitary Science on the Comfort of Country Homes."	Herbert Freyberg, F.S.I., M.S.A.
,,	30th.	"Southwell Cathedral."	Harry Gill, M.S.A.
Feb.	13th.	"Renaissance in Spain."	James B. Fulton, A.R.I.B.A.
,,	27th.	"Amiens Cathedral."	G. A. T. Middleton, A.R.I.B.A., M.S.A.
Mar.	13th.	"Wall Papers."	Noel D. Sheffield, M.S.A.
,,	27th.	"Winchester Cathedral."	E. W. Harvey Piper (Hon. Member).
April	10th.	"Westminster Abbey."	Charles W. Ball, M.S.A.
,,	24th.	"Devon Parish Churches of the 15th Century."	F. E. Howard.
May	8th.	"St. Alban's Abbey."	E. W. Harvey Piper (Hon. Member).
Oct.	16th.	"Church Plate."	C. A. Markham, F.S.A.

Professor Rimington (Hon. Member) was unfortunately prevented by illness from contributing a paper.

The thanks of your Council are tendered to the lectures, some of whom came from a considerable distance to give the Members the benefit of their knowledge of the subjects.

The interim lantern lectures were an experiment which your Council have not felt justified in repeating at present. They feel considerable diffidence in inviting gentlemen to go to the trouble and expense involved in delivering a lecture unless there is good reason for supposing that the attendances will be sufficient to show the lecturer that his services are appreciated. A good many Members content themselves with the knowledge that the lectures are published in the *Journal*, but that does not entirely fulfil the objects of the meetings, and it is a poor compliment to a lecturer to take his remarks as read.

The task of finding sufficiently interesting subjects to draw an audience and ensure discussion is becoming increasingly difficult, and is a matter in which the Members of the Society can greatly assist the Council by their co-operation.

Those who have attended the Meetings will have noticed the improvement of the lighting of the rooms, due to the adoption of the indirect system of distributing the electrical illumination. The " eye rest " effect is noticeable, and is a welcome change from the glare of the unprotected or insufficiently protected lamps.

Library.—The scope of the Society's Loan Library will compare favourably with that of any other similar Institution. It consists largely of modern technical works, and is constantly being added to. Some hundreds of books are distributed annually through the post to country Members. The Volumes have been re-catalogued, and a list of those available on loan is being printed for distribution to the Members. The thanks of your Council are extended to those publishers, authors and owners who have been kind enough to present books to the Society.

Publications.—The Society's *Journal* is intended not only as a record of proceedings, but as a medium for affording such other information as its scope will permit, and for the interchange of ideas.

Members can assist in rendering the publication of greater value by communicating with the Editor on any subject which they think will be of general interest, or by sending newspaper cuttings. There is also great scope for Members who will co-operate by reviewing books.

Your Council will be glad to receive and consider suggestions from Members for increasing the utility of the *Journal*.

Social Gatherings, Etc.—The following gatherings have been held during the year, in addition to the Ordinary Sessional Meetings :—

Students' Social Evening	January 22nd.
Cinderella Dance, Caxton Hall	February 4th.
Students' Visit to the British Museum	March 8th.
Students' Bohemian Concert	April 1st.
Building Trades' Exhibition	April 21st.
Twenty-ninth Annual Dinner	April 22nd.
Concert of Chamber Music	April 28th.
Hendon Aerodrome	June 28th.
National Gas Exhibition	October 1st.

The proposed visit to Paris at Whitsuntide did not take place, owing to insufficient support.

Architectural Education.—At their first meeting your Council received a report from the Beaux Arts Committee to the effect that after due consideration they had decided to institute in England a similar form of Architectural training to that which exists at The Ecole des Beaux Arts in Paris, and outlining their proposals for the establishment of an Architectural Atelier in London. Your Council as supporters of the scheme were invited to guarantee a sum sufficient for the Committee's estimated preliminary expenses, which they at once did.

It was subsequently reported to your Council that the Société des Architectes Diplômés par le Gouvernement had given their adherence to the scheme, and that several eminent Members of the Institut de France and patrons of the Ecole des Beaux Arts, Paris, had joined the Committee in addition to a number of distinguished English Architects.

It was thought by the Beaux Arts Committee that it would be in the best interests of the proposal that the Committee should be reconstituted as a separate body owing allegiance only to the Ecole des Beaux Arts and the French Society, and that it should not be identified with any one Architectural Society in Britain.

The part played by the Society in bringing the Committee into existence and enabling it to place its scheme upon a permanent basis was recognized and appreciated, and your Council agreed at once to the Committee's proposals.

The Committee then issued a statement and prospectus, and in February, it was announced that they had opened the first Architectural Atelier in London, at 16, Wells Mews, Wells Street, Oxford Street, W.

It would be out of place for your Council to comment in this report upon the work of the Committee, even if they had the right to do so. The results so far attained speak for themselves. The Atelier is there for all to see. The Beaux Arts Committee's proposals have struck at the root of the system of Architectural Education in this Country, and already a proposed remedy for some of the obvious defects which exist is being applied elsewhere as well as at the Atelier. Your Council have shown their confidence in the Committee's proposals by contributing a substantial sum to their funds, and their example has been followed by several individual Members of the Society. If other Members would make themselves personally acquainted with the Committee's work, they could not do otherwise than become enthusiastic supporters of the scheme. Your Council are convinced that if the Society had done nothing else during the past year than that of enabling the Beaux Arts Committee to establish itself, it would have reason to be satisfied in having achieved something which is calculated to do the art of Architecture in this Country a lasting good.

Finance.—The Revenue Account which is presented with this Report shows an increase in the expenditure in printing and stationery, an item which must always fluctuate with the work being dealt with at the time. There is also an increase in

The Society of Architects' Revenue Account and Balance Sheet for the Year ended 31st October, 1913.

REVENUE ACCOUNT.

	£	s.	d.	£	s.	d.
To EXPENSES—						
General	107	11	7			
House	131	17	9			
Postages	119	4	2			
Printing and Stationery ..	179	6	6			
Rent, Rates, Taxes & Repairs	200	3	11			
Salaries	565	9	3			
Commission	105	1	10			
Legal	49	3	2	1457	18	2
,, PUBLICATIONS—						
Printing & Postages, *Journal*	517	8	2			
,, ,, *Year Book*	162	13	11	680	2	1
,, SOUTH AFRICAN BRANCH ..	..			40	0	0
,, SOCIAL FUNCTIONS—						
Annual Dinner	113	8	0			
Cinderella Dance ..	44	6	9			
Chamber Concert ..	4	0	4	161	15	1
,, EXAMINATIONS	..			39	16	7
,, STUDENTS' PRIZES—						
Travelling Studentship ..	25	0	0			
Architectural Scholarship	10	0	0			
Quarterly Competitions ..	3	3	0	38	3	0
,, BAD DEBTS..	..			59	12	11
,, INTEREST ON OVERDRAFT ..	..			32	4	0
,, DEPRECIATION—						
On Leasehold Premises ..	89	0	0			
,, Furniture	59	17	6			
,, Library Books ..	20	12	9			
,, Investments ..	7	19	8	177	9	11
,, SURPLUS FOR THE YEAR ..	..			216	14	8
				£2903	16	5

	£	s.	d.	£	s.	d.
BY SUBSCRIPTIONS—						
Members .. .	2059	1	0			
Students	114	9	0	2173	10	0
,, PUBLICATIONS—						
Advts. and Sales, *Journal*	343	6	4			
,, ,, *Year Book*	164	14	2	508	0	6
,, SOCIAL FUNCTIONS—						
Annual Dinner ..	73	13	4			
Cinderella Dance ..	40	18	0	114	11	4
,, EXAMINATION FEES				76	13	6
,, INTEREST ON INVESTMENTS				31	1	1
				£2903	16	5

	£	s.	d.	£	s.	d.
To DONATIONS—						
Beaux Arts Committee ..	100	0	0			
Architects' Approved Society	20	0	0			
,, Ben. Society ..	10	10	0			
Sundry	11	11	0	142	1	0
,, Balance carried to Balance Sheet				74	13	8
				£216	14	8

	£	s.	d.
By Surplus for year carried down	216	14	8
	£216	14	8

BALANCE SHEET.

	£	s.	d.	£	s.	d.
To SUNDRY CREDITORS—						
Subscriptions paid in advance	82	8	6			
Sundry	160	14	5	243	2	11
,, BANK OVERDRAFT	772	14	11			
,, Interest to date	10	12	0	783	6	11
,, BUILDING FUND				107	9	6
,, PROFESSIONAL DEFENCE FUND ..				200	0	0
,, SURPLUS—						
Balance as at 31st Oct., 1912	2966	14	10			
Entrance Fees 204 15 0						
Less S.A. Branch 9 14 3						
195 0 9						
Less Professional Defence Fund 100 0 0	95	0	9			
Surplus from Revenue Account, 1912-13	74	13	8	3136	9	3
				£4470	8	7

	£	s.	d.	£	s.	d.
BY LEASEHOLD PREMISES ..	2855	12	6			
,, Additions this Year	126	19	1			
	2982	11	7			
Depreciation, 1911-12 89 0 0						
,, 1912-13 89 0 0	178	0	0	2804	11	7
,, FURNITURE—						
Balance from last Account ..	383	3	9			
Additions during Year ..	45	3	2			
	428	6	11			
Depreciation	59	17	6	368	9	5
,, LIBRARY—						
Balance from last Account ..	111	17	6			
Additions during Year ..	5	7	0			
	117	4	6			
Depreciation	20	12	9	96	11	9
,, SUNDRY DEBTORS—						
Members	129	5	0			
Students	17	7	0			
Advertisers	139	10	2			
Sundry	36	5	10			
	322	8	0			
Reserve for Bad Debts ..	93	14	4	228	13	8
,, INVESTMENTS—						
£568 18s. 8d. Met. Cons. Stock @ 74	421	0	3			
£750 Consols @ 72⅞ ..	546	11	3	967	11	6
,, PETTY CASH				4	10	8
				£4470	8	7

We have audited the above Balance Sheet with the Books of the Society, and have obtained all the information and explanations we have required. In our opinion such Balance Sheet is properly drawn up so as to exhibit a true and correct view of the state of the Society's affairs according to the best of our information and the explanations given us and as shewn by the books of the Society.

140, LEADENHALL STREET, E.C.
LONDON, *December 8th*, 1913.

ELLIS MARSLAND, *Hon. Auditor.*
BOLTON, PITT & BREDEN, *Auditors.*

the rent and taxes, this being the first full year, the Society having hitherto held the premises at a peppercorn. There are also legal charges which cover the costs incurred during the negotiations with the Institute on Registration extending over two years. The other items of general expenditure are normal.

The actual profit on the year's working is £216 14s. 8d., of which a sum of £142 1s. 0d., has been donated to objects outside the Society, including £100 to the Beaux Arts Committee, and £20 to The Architects' and Surveyors' Approved Society, the latter being The Society of Architects' proportionate share of the preliminary cost, in conjunction with other interested bodies. The nett surplus for the year is £74 13s. 8d., which your Council consider to be a satisfactory result. The Society is not incorporated for the purposes of profit, and it has a responsibility not only to its own Members, but to the profession generally, in the allocation of its surplus funds.

The subscriptions show a steady increase, and are sufficient in themselves to cover the whole of the ordinary working expenses of the Society, and the cost of the publications. The total nett cost to the Society of the *Journal* and *Year Book* that is to say, the difference between the cost of production and distribution, and the Revenue derived from sales and advertisements is only £172.

The Examination Fees are less than last year, which is due largely to your Council permitting relegated candidates to sit for a stated period without further fee.

The Balance Sheet shows a total surplus of Assets over Liabilities of £3,136 9s. 3d., which is arrived at after allowing the fullest possible margin for depreciation and doubtful debts. The debt to the Bank is reduced to £783, and it may be noted here that arrangements were made during the year for the loan to be converted into an overdraft, which considerably facilitated matters, and resulted in a saving of interest. The overdraft on October 31st, is less than the market value of the cash securities deposited with the Bank. The Society's leasehold premises stand at £2,804, and are not encumbered. The additions this year placed to that amount are chiefly the Architect's fees, and a sufficient sum has been written off for depreciation during the year. In this respect, your Council are proposing first of all to wipe out the overdraft at the Bank, and then to provide a Sinking Fund either by a policy of insurance or out of the Society's funds. Your Council would remind Members that the Entrance Fees do not now form part of the Revenue, and that, therefore, whatever surplus may be made annually is proportionately less than when the Entrance Fees used to be taken into Revenue. They would also point out that the moiety repayable to the South African Branch has been increased by including a proportion of the Entrance Fees as well as the Subscriptions.

The professional Auditors, Messrs. Bolton, Pitt and Breden, retire, and are eligible for re-election, on terms to be approved by the General Meeting. The Honorary Auditor is appointed by your Council, who have to thank Mr. Marsland for having accepted the position again.

South African Branch.—The Sixth Annual Report of the Johannesburg Branch of the Society, and the Statement of Accounts, has been published in the *Journal*. The Branch continues to grow in numbers and in influence. It has nearly fifty Members, and a considerable balance in hand. The value of its active work on behalf of the profession, particularly in connection with Registration, is apparent. The Branch has, with the approval of your Council, appointed Honorary Correspondents in Cape Town, Port Elizabeth, and Durban, with a view to further extending the scope and utility of the Society.

Your Council are greatly indebted to the Executive and Members of the Branch for their co-operation. It gave your Council the greatest pleasure to have an opportunity of meeting and entertaining the Honorary Secretary of the Branch, Mr. D. Ivor Lewis, during his recent visit to England. Mr. Lewis was able to give them valuable information regarding the working of the Transvaal Registration Act and of the work of the Society generally in South Africa, and to show them that the difficulty of organizing the Society's Examination in Africa arose chiefly from the lack of suitable candidates due to the want of facilities for Architectural Education in South Africa on the one hand, and to the fact that the Examinations under The Transvaal Act, are sufficient for Registration in that district, and as a registered South African Architect being otherwise qualified would be eligible for Membership in the Society, the necessity for the establishment of other similar Examinations in the Transvaal was not now so apparent.

Architects' and Surveyors' Approved Society.—Your Council took an active part in the formation of this Approved Society, in conjunction with other interested bodies, and contributed on behalf of the Society a proportion of the preliminary expenses. The interim report of the Approved Society for the twelve months, ending July 13th last, shows that there were then some sixteen hundred Members, of whom thirty-seven were women, and it is found in practice that the Society has on the anticipated cost of benefits based upon the tabulations of the Government Actuaries, saved over £372 during the first six months of the sickness and maternity benefits. There is in addition a credit balance of £137 on the Administration Account, and therefore an approximate total surplus of £509. These figures show that calls upon the approved Society are likely to be unusually light, and that consequently a surplus may be anticipated for augmenting the present benefits.

It is obviously desirable that Members should make the Approved Society known to those members of their staffs who are qualified to join it, and their co-operation in this direction is invited.

Attention may be drawn to the fact that Architects who do not need to take advantage of the Approved Society, or who are not qualified to do so, can support it by becoming Honorary Members, at an annual contribution of not less than 10s. 6d.

These subscriptions are placed to a fund which is being raised, and which will be used to augment the benefits already offered by the Approved Society.

Statutory Registration of Architects.— Your Council so long ago as July 17th, 1912, invited the Council of the R.I.B.A. to state definitely whether it was their intention in giving consideration to any steps which they might propose to take in promoting a Bill in Parliament for the Statutory Registration of Architects, to invite the further co-operation of the Society. This question has not yet been answered by the Institute, and early in the Session your Council placed the Society's Draft Bill in the hands of a Sub-Committee for revision, and made their arrangements for proceeding with their propaganda. This included the preparation of a statement giving reasons why in the opinion of the Society it is in the public interest that Architects should be registered. Your Council invited the Council of the R.I.B.A. to join them in issuing a statement on the principle of Registration, and a reply was received to the effect that the Registration Committee of the Institute were considering a draft Bill, and that if in due course it was decided to invite the Society to enter into a joint discussion, they would be so informed. Your Council thereupon notified the R.I.B.A. of the Society's intentions to proceed with the issue of the statement referred to, which was duly sent out and followed up a newspaper propaganda from the same point of view. This resulted in widespread publicity being given to the matter. Your Council have not taken any steps to present the Society's Bill in Parliament while the matter of Registration has been under consideration by the Council of the Institute, but in view of recent developments they have placed the Society's draft Bill in the hands of Counsel for " settlement " in conference, with a view to its introduction into Parliament during the next Session.

Your Council desire to make it clear that they have not departed from the principles laid down by the Society thirty years ago. They propose to continue to advocate and promote the Statutory Registration of Architects, on lines which will protect all vested interests, and provide for the welfare of the community the art and the profession in the future. They are of the opinion that the draft Bill embodies the principles upon which a good public case can be made out for Registration.

DISCUSSION.

MR. HERBERT FREYBERG, F.S.I., in proposing the adoption of the report was glad to note that the membership roll had been drastically revised, and that deadheads who did not pay up their subscriptions had been struck off the list. There had been a stiffening up of the examinations, which was very welcome. The Council had done well to take steps to protest against the practice of some public authorities restricting candidates for appointments to membership of one body. Members ought to do all in their power to maintain and raise the status of membership of the Society.

The motion was seconded by MR. H. TRIBE COVER, and, on being put to the meeting, was unanimously adopted.

The adoption of the Balance Sheet and Accounts for the past year was moved from the Chair, in the unavoidable absence of the Hon. Auditor, Mr. Ellis Marsland. Mr. George H. Paine suggested that another year the principal figures of the previous year should also be shown, by way of comparison. The President said the proposal would be considered by the Council. The Balance Sheet was then unanimously adopted.

The re-election of Messrs. Bolton, Pitt, and Breden, as Auditors was moved by Mr. J. Herbert Pearson, and, having been seconded by Mr. R. G. Bare, was agreed to.

MR. G. H. PITT, in returning thanks, said it was satisfactory to note the healthy condition of the Society's finances. There were no fictitious assets, and the leasehold of the premises had been paid for. He would point out that the entrance fees—£204—had been paid into capital account, and not, as was often the case with societies, to revenue account. The net result was that they had a surplus for the year of £216 14s. 8d., and were about £300 better off than last year.

MR. R. G. BARE, proposed a hearty vote of thanks to the retiring officers, Mr. E. J, Partridge, Hon. Treasurer, for the past two years; Mr. B. R. Tucker, Hon. Librarian; and Mr. T. Stewart Inglis, Member of Council. This was seconded by Mr. Salisbury, and was agreed to, as was a similar vote of thanks to Col. Seymour Leslie, R.E., and Mr. Ellis Marsland, for their services to the Society, in the respective capacities of Hon. Secretary and Hon. Auditor, for the past four years, proposed by Mr. E. W. Harvey Piper, and seconded by Mr. Bare.

On the proposition of MR. GEORGE H. PAINE, seconded by COL. LESLIE, a vote of thanks to Mr. Leonard Tubbs, the Hon. Solicitor to the Society, was passed.

MR. R. G. BARE, proposed a vote of thanks to Mr. C. McArthur Butler, who has been the efficient and energetic Secretary to the Society since 1898. With it he coupled the name of Mr. William Wanmer, the Assistant Secretary, and the other members of the clerical staff. In seconding the motion, Mr. J. Herbert Pearson observed that Mr. Butler let no opportunity slip of bringing forward the case for the Society in the public Press. Mr. R. Goulburn Lovell, Vice-President, supported the motion, and mentioned that Mr. Butler was also Secretary of the Beaux Arts Committee, which was doing an excellent work on the right lines in the training of young architects.

MR. BUTLER in responding, gave some details showing the amount of work the Staff had to deal with, and then read some "Notes on the Work of the Society, 1884—1914." He mentioned that four of the founders were present that evening ; Mr. E. J. Kibblewhite, who had written letters in the *Building News*, under the pseudonym of " One Willing to Help," and who served on the first Council ; Mr. Henry Branch ; Mr. R. G. Bare, a former Hon. Librarian ; and Mr. E. W. Harvey Piper. He had received apologies and regrets from Mr. G. A. T. Middleton, Mr. Ellis Marsland, Mr. W. L. Grant, Mr. Finch, Mr. Kinder, Mr. C. E. Jackson, and Mr. W. P. Ryan, who had also rendered valuable services to the Society in its earlier years, and other founder-members who, from various causes, were not able to be present.

MR. E. J. KIBBLEWHITE, at the invitation of the President, gave a most interesting résumé of his own reminiscences of the early days of the Society, and the part he had taken in connection with its foundation.

MR. H. BRANCH, another of the original members, observed that Mr. Kibblewhite had in a most interesting manner recalled some of the early history of the Society. The report of the Council showed the growth of the Society and the wide range of its activities in the interests of the profession and the public generally. There had been a similar growth in the duties and knowledge required of an architect, and in the classes of buildings in which he was concerned.

The few survivors, who met at the Annual Meeting of The Society of Architects, of those who, nearly thirty years ago, on May 8th, 1884, assembled in the Board Room of the Strand Board of Works at 5, Tavistock Street, W.C., to promote the formation of the Society, have certainly no reason to be ashamed of the fruit of their endeavours. An organization which began with 186 members, and now numbers about 1,200, and which seven years after its start could only face the next year with a surplus of £39, and now starts 1914 with £3,136 to its credit, will hardly be ignored either by Parliament or the Privy Council, whether we are all to be registered or become " chartered architects." Its list of members will bear comparison with the best similar organization, and, unlike the R.I.B.A. in its earlier years, the Society has had no need to find its Presidents among laymen. As regards Registration, about the advisability of which some of our contemporaries seem to have altered their opinions lately almost as often as the weather has changed, the fact remains that nothing has reversed the plebiscite of the profession taken by the Society in 1903, when out of between five or six thousand architects at least two-thirds expressed their sympathy therewith, and fewer than 170 voted against it. Moreover, when the R.I.B.A. Council at that time issued a counter-statement and asked for the opinions of the allied societies, the resolutions subsequently passed by those bodies confirmed the individual voting of their members in favour of the proposal. The interesting notes of the Society's thirty years' work, which were read at last night's meeting by the Secretary, will, we are glad to hear, be expanded by him into a more complete record.—*The Building News.*

The Re-incarnation of Ideas.

It is interesting to note how some suggestions made by members of the Society from time to time on professional matters pass unnoticed, or are "damned with faint praise" at the time, only to be re-incarnated from other sources in due course. For instance, Mr. Percy B. Tubbs, F.R.I.B.A., M.S.A., in a communication to the *R.I.B.A. Journal* some years ago suggested the formation of a class of "Chartered Architects." It was not followed up at the time, but now the Institute come forward with a similar proposal. Again in November, 1912, Mr. Tubbs suggested in his Presidential Address to the Society that the Institute should look after the art of architecture and leave the Society to deal with the business side of the profession. This suggestion, which was deprecated by some of the leading professional journals, is now revived by one of them, the gist of whose observations we print side by side with those of Mr. Tubbs. Other instances might be quoted, but these will suffice.

THE R.I.B.A. AND THE SOCIETY.

The R.I.B.A. and the Society each have the same object in view, viz., the advancement of Architecture, and the protection of the rights and privileges of Architects. As at present constituted and administered, there is of necessity a certain amount of overlapping and clashing of interests which is much to be regretted. The Institute has a Royal Charter which was granted "for the general advancement of Civil Architecture and for promoting and facilitating the acquirement of knowledge of the various Arts and Sciences connected therewith, it being an art esteemed and encouraged in all enlightened nations as tending greatly to promote the domestic conveniences of citizens and the public improvement and embellishment of towns and cities." . . . . . .

The R.I.B.A. might be the sole examining body and be responsible for a standard of Ethics. Relieved of routine work of a business nature which now appears to cripple its energies, it would be free to devote all its time to the duties imposed upon it by its Charter and to work for the advancement of Architecture as the mistress art regardless of all other considerations. . . . . . But no art can flourish unless those who practise it can live by it in decency and comfort and receive that consideration from the public which the value of their work deserves. The Society by giving its undivided attention to studying the welfare and the business interests of all members of the profession would be doing a work of paramount importance equally necessary to the advancement of Architecture, even if less ornamental than that performed by the Institute.—MR. PERCY B. TUBBS, F.R.I.B.A., M.S.A., November, 1912.

The Institute was founded, we understand, to promote the art of architecture. One may reasonably ask whether this end can be attained if its actions are to be controlled and governed by the votes of some four thousand members. We know, and we dare to say they know, there are only a fractional portion of that number whose work will tend to influence the public mind in its judgment of architecture. An ideal body to look after the interests of the art of architecture would be composed of those who have shown their ability to help it onward and upward by their executed works. The higher objects for which the Institute exists we all know can never be furthered by the extension of its ranks, as we now see it. Time and a little serious thought would, we feel, soon satisfy the larger number of sound practitioners that the present policy will defeat the object it has in view.

Now we venture to suggest whether, even yet, there is not a possibility of a change of action which would put the Institute back into its proper track. We suggest that the Institute might leave to The Society of Architects the prosecution of a Bill for trade protection, such as registration or charterism (call it what you will), thus allowing that body to look after the commercial interests of the profession, whilst the Institute pursues its proper path as the guardian of the art of architecture. We venture to think that both the dignity and the true mission of the Institute might thereby be permanently assured. We feel sure that as a body for advice and reference on matters of art, it would occupy a much stronger position if it did not concern itself, inter alia, with commercial concerns.—*The British Architect*, January, 1914.

*A BILL

TO

Provide for the Registration of Architects. A.D. 1914.

WHEREAS it is expedient that persons requiring professional aid in Architecture should be enabled to distinguish qualified from unqualified practitioners :—

BE IT THEREFORE ENACTED by the King's most Excellent Majesty, by and with the advice and consent of the Lords Spiritual and Temporal, and Commons, in this present Parliament assembled and by the authority of the same, as follows :—

Short Title. 1. This Act may for all purposes be cited as the Architects Act, 1914.

Commencement of Act. 2. This Act shall commence and take effect from the first day of January, One thousand nine hundred and fifteen.

Council. 3. A Council, which shall be styled "The Council of Architectural Education and Registration of the United Kingdom," hereinafter referred to as "the Council," shall be established.

Members of Council. 4. The Council shall consist of the following Members (that is to say) :—

........persons nominated from time to time by His Majesty, with the advice of His Privy Council; and the Architects chosen from time to time by each of the following bodies :—

........by the Council of the Royal Institute of British Architects.

........by the Council of The Society of Architects, founded 1884.

........by the Council of the Royal Institute of Architects, Ireland ; and

........Architects hereinafter referred to as "direct representatives," who shall be elected by registered practitioners.

Qualification. 5. The professional Members of the Council must be qualified to be registered under this Act, and must register as soon as possible after the appointment of the Registrar.

(1) The direct representatives must be themselves registered under the Act.

Resignation or death of Member of Council. 6. The Members of the Council shall be chosen and nominated for a term not exceeding Five years, and shall be eligible for re-appointment, and any member may at any time resign his appointment by letter addressed to the Registrar, and upon the death or resignation of any member of the said Council some other person shall be constituted a member of the said Council in his place ; but it shall be lawful for the Council during such vacancy to exercise the powers hereinafter mentioned.

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* Draft Bill, subject to revision and amendment.

Vacancies on Council. 7. The Members of the Council, except the direct representatives, shall be appointed within Three months of the passing of this Act, and thereafter within Three months of the occurrence of a vacancy, and the appointments shall be notified in the case of the first Council to the Privy Council, and thereafter to the Registrar.

Time and place of Meeting of Council. 8. The Council shall hold their first Meeting within Four months from the commencement of this Act, in such place and at such time as the Lords of the Privy Council shall appoint, or in the event of the Privy Council not fixingthe time and place of meeting within the first Three months of the limit of time named, then the meeting is to be held at the Westminster Palace Hotel, on the first Wednesday of the fourth month from the passing of this Act, at twelve o'clock noon, and shall elect a President out of their own number for a term not exceeding Three years, and make such rules and regulations as to the times and places of the meetings of the Council and the mode of summoning the same as to them shall seem expedient, which rules and regulations shall remain in force until altered at any subsequent meeting ; and in the absence of any rule or regulation as to summoning a meeting of the Council, it shall be lawful for the President to summon a Meeting at such time and place as to him shall seem expedient, by letter addressed to each member ; and at every meeting, in the absence of the President, some other Member to be chosen from the members present, shall act as President, and all acts of the Council shall be decided by the votes of the majority of the Members present at any Meeting, the whole number present being not less than Seven, and at all such meetings the President for the time being shall, in addition to his vote as a Member of the Council, have a casting vote in case of an equality of votes.

(1) The President of the Council or any other person whom the Council may from time to time appoint shall be the returning officer for the purpose of elections of direct representatives, and such returning officer shall, some time, not more than six weeks after the issue of the first copy of the register, and thereafter not less than six weeks nor more than two months before the day on which the term of office of any such representative will expire, and as soon as conveniently may be after the occurrence of any vacancy arising from the death or resignation of any such representative, issue his precept to the Registrar, requiring the said Registrar to cause a representative or representatives to be elected by the registered practitioners within twenty-one days after the receipt of the precept of the returning officer ;

(2) The election shall be conducted in such manner as may be provided by regulations to be made by the Council and approved by the Privy Council, provided as follows :—

(*a*) The nomination shall be in writing, and the nomination paper of each candidate shall be signed by not less than ten registered practitioners ; and

(*b*) The election shall be conducted by ballot papers, and it shall be the duty of the Registrar to cause a ballot paper to be forwarded by post to each registered practitioner at his registered address, but the election shall not be rendered void by reason of the omission of the Registrar to cause such ballot paper to be forwarded in any particular case or cases, and any registered practitioner to whom a ballot paper has not been sent in pursuance of this Act, may, on application to the Registrar, obtain one from him ; and

(*c*) Any registered practitioner entitled to vote at such election may vote for as many candidates as there are representatives to be elected.

(3) The registrar shall certify to the returning officer the person or persons elected by the registered practitioners ;

(4) A direct representative elected in place of any such representative retiring on the expiration of the period for which he was elected shall come into office at the expiration of that period, and a direct representative elected to fill a vacancy caused by the death or resignation of any such representative shall come into office on the day on which he is certified by the Registrar to the returning officer to have been elected ;

(5) The expenses attending the election of a direct representative shall be defrayed as part of the expenses of the Council.

Election of President of Council.

9. The Council from time to time, on the occurrence of a vacancy in the office of President of the Council shall elect one of their number to be President for a term not exceeding Three years, and not extending beyond the expiration of the term for which he has been made a Member of the said Council.

Revision of constitution of Council.

10. (1) The Council may at any time represent to the Privy Council all or any of the following matters :—

(*a*) That it is expedient to confer on the registered practitioners the power of returning one or more additional members to the Council ;

(*b*) That it is expedient to confer on any architectural college, or university, or other architectural body, not being one of the constituent bodies for the time being of the Council, and being in the opinion of the Council of sufficient importance to be worthy of such privileges, the power of returning one or more members to the Council, either separately or collectively with any other architectural body or bodies ; and the power of increasing from time to time the number of the members to be so returned.

(*c*) That it is expedient that any constituent body having, in the opinion of the Council, so diminished in importance as not to be entitled to such privilege, should either be wholly or partially deprived of the power of returning a member or members separately, and permitted to return a member or members collectively with some other architectural body or bodies;

(*d*) That the standard or conduct of the qualifying examinations in the opinion of the Council is unsatisfactory, or that the body or bodies constituted as examiners is, or are unwilling to act, and that it is expedient that such other body or bodies be appointed as to the Privy Council shall seem fit.

(2) The Privy Council, before considering such representation, shall cause the same to be laid before both Houses of Parliament.

(3) If either House of Parliament, within forty days (exclusive of any period of adjournment for more than one week) next after any such representation has been laid before such House, present an address to His Majesty declaring that such representation, or any part thereof, ought not to be carried into effect, no further proceedings shall be taken in respect of the representation in regard to which such address has been presented; but if no such address is presented by either House of Parliament within such forty days as aforesaid, the Privy Council may, if they think fit, report to His Majesty that it is expedient to give effect to such representation, and it shall be lawful for His Majesty by Order in Council to give effect to the same, and any Order in Council so made shall be of the same validity as if it had been enacted in this Act.

Existing Charters remain in force.

11. The Charters of the Royal Institute of British Architects are hereby confirmed, and are declared to be and shall be in full force and virtue in so far as they are not inconsistent with this Act, but not so as to prevent the making of any amendment thereof or addition thereto by any supplemental Royal Charter not being inconsistent with this Act.

Bye-laws.

12. The Council shall have power to make, alter, or revoke from time to time orders, bye-laws and regulations subject to the approval of the Privy Council.

Appointment of Registrar and other Officers.

13. The Council shall appoint a Registrar who shall act as Secretary of the Council, and the Council shall also appoint a Treasurer and so many clerks and servants as shall be necessary for the purposes of this Act, and every person so appointed by the Council shall be removable at the pleasure of the Council, and shall be paid such salary as the Council shall think fit.

Fees for attendance at Council. 14. There shall be paid to the Members of the Council such fees for attendance and such reasonable travelling expenses as shall from time to time be allowed by the Council and approved by the Privy Council.

Application of Fees. 15. All moneys arising from fees payable on registration, or the annual renewal fees, or from the sale of copies of the Register, or otherwise under this Act, shall be paid to the Treasurer, and shall be applied in accordance with such regulations as may be from time to time made by the Council in defraying the expenses of registration, and the other expenses of the administration of this Act, and subject thereto, towards the support of museums, libraries, or lectureships, or for public purposes connected with the profession of architecture, or towards the promotion of learning and education in connexion with architecture.

(1) The Council may allocate such sum or sums of money as shall be proved to their satisfaction to have been expended in promoting this Act, and which sum or sums are, in the opinion of the Council, reasonable, and may order the same to be paid through their Treasurer to the body or bodies, person or persons, who may establish the claim or claims within twelve months of the passing of this Act ;

(2) The Council shall have power to invest any sums not so expended in any stocks, funds, or securities in or upon which trust funds under the control of the Court may for the time being be authorized by law to be invested in the names of any three of their number appointed from time to time as trustees, and any income derived from such invested sums shall be added to and considered as part of the ordinary income of the Council ;

(3) The Council may also use surplus funds or invested capital for the rental or purchase of land or premises, or for the building of premises to serve as offices, examination halls, libraries, museums, or for any other public purpose or purposes connected with architecture.

Accounts to be published. 16. The Treasurer shall keep a true account of all sums of money received and paid by him under this Act, and such accounts shall be audited by a Chartered or Incorporated Accountant and submitted to the Council. Such accounts shall be published annually.

Duty of Registrar to keep the Registers. 17. It shall be the duty of the Registrar to keep the Registers in accordance with the provisions of this Act and the orders and regulations of the Council.

(1) The Registrar shall remove from the said Register the name of any person who has neglected to pay his annual renewal fee, or the name of any person who has ceased to practise, but not (save as hereinafter provided) without the consent of that person ;

(2) In the case of any registered person neglecting to pay his annual renewal fee, on or before the Thirtieth day of November of any year, in respect of the year commencing on the first day of January of the following year, or in the case where the Registrar has any reason to think that any registered person has ceased to practise, the Registrar shall send by post in the first case on or before the Fifteenth day of December, a notice to such person applying for the payment of such annual renewal fee, and in the second case a notice to such person by post inquiring whether or not he has ceased to practise, or has changed his residence, and if the Registrar does not within Three months after sending the notice in either case receive any answer thereto from such person, the Registrar shall within fourteen days after the expiration of the three months send him (in either case) by post in a registered letter another notice referring to the first notice, and stating that no answer thereto has been received, and if the Registrar does not within one month after sending the second notice receive any answer thereto (in either case), the name of such person shall be erased from the Register PROVIDED ALWAYS that the same may be restored by direction of the Council should they think fit to make an order to that effect ;

(3) In the execution of his duties, the Registrar shall act in each case on such evidence as appears to him sufficient.

Removal of name from Register by Council.

18. The Council may direct that a name be removed from the Register in the following cases (that is to say), at the request or with the consent of the person whose name is to be removed ; or where a name has been incorrectly entered, or has been fraudulently entered or procured to be entered ; or where a person registered has, after the passing of this Act, been convicted, either in His Majesty's Dominions, or elsewhere, of an offence which, if committed in England, would be a misdemeanour or higher offence ; or where a person registered is shown to have been guilty after his registration, and either in His Majesty's Dominions or elsewhere, of any conduct infamous in a professional respect.

Registration of name to the Register.

(1) Where the Council may have removed the name of any person from the Register, the name of that person shall not be again entered in the Register except by a resolution of the Council, or by an Order of a court of competent jurisdiction ;

(2) The Council may by resolution direct the Registrar to restore to the Register any name removed thereform, either without fee or on payment of such fee, not exceeding the registration fee, as the Council may from time to time fix, and the Registrar shall restore the name accordingly;

(3) The name of any person removed from the Register at the request of such person or with his consent shall, unless it might if not so removed have been removed by Order of the Council, be restored to the Register on his application and on payment of such fee, not exceeding the registration fee, as the Council may fix.

Persons qualified to be registered.

19. (1) Every person who on the first day of January, One thousand nine hundred and fifteen, is a Fellow, an Associate, or a Licentiate of the Royal Institute of British Architects, a Member of The Society of Architects, founded 1884, or a professional Member of either of the Architectural Societies included in Schedule " A " to this Act, shall, in respect of such Membership as aforesaid, be entitled to be registered under this Act, on payment of a registration fee to be fixed by the Council, and pending the fixing of a fee by the Council, a fee of Three pounds.

(2) Any person who can prove to the satisfaction of the Council that he was actually practising architecture in the United Kingdom on the first day of January, One thousand nine hundred and fourteen, and is still so practising on the first day of January, One thousand nine hundred and fifteen, or who has served as apprentice, assistant, or practitioner in architecture, all or either, for five years in the aggregate, prior to the first day of January, One thousand nine hundred and fifteen, and after having obtained the age of seventeen years, shall, on payment of a fee to be fixed by the Council, and pending the fixing of the fee by the Council, a fee of Three pounds, be entitled to be registered on depositing with the Registrar a declaration signed by him and properly attested according to one or other of the forms in Schedule " B " or Schedule "C " of this Act.*

(3) PROVIDED ALWAYS that it shall be lawful for any or all of the several bodies mentioned in Schedule " A " to deposit with the said Registrar within Three months from the date of the first Meeting of the Council, certified lists of such of their Members as are entitled under the provisions of this Act, as aforesaid, to be registered, stating the addresses of such persons; and it shall be lawful for the Registrar thereupon, and upon payment of a fee of One pound by each such person to enter in the Register the names of the persons mentioned in such lists, with their qualifications and addresses as therein stated, without other application in relation thereto.

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* Schedules " B " and " C " are not printed with this Draft.

(4) An applicant for admission after the first day of January, One thousand nine hundred and sixteen must be not less than Twenty-one years of age, and must, except in cases hereinbefore and hereinafter mentioned, have been educated for architecture in a manner approved by the Council, and have passed such examination or examinations as the Council shall authorize, and as hereinafter mentioned.

(a) The Council shall from time to time lay down regulations and vary the same with the sanction of the Privy Council with regard to the duration and character of architectural education to be demanded under this Section, and also as to the notification thereof to the Registrar, and the imposition of fees for notification, and other matters relating thereto.

(5) A person who has gone through a satisfactory course of architectural education in accordance with this Section of this Act, and has passed such examination or examinations as the Council shall authorize, shall be registered on depositing with the Registrar a Declaration according to the Form in Schedule "D"* to this Act, together with a Certificate of Examination and upon payment of a registration fee to be fixed by the Council, or pending the fixing of the fee by the Council, a fee of One pound.

Annual renewal fee.

20. Registered practitioners under this Act shall pay in advance an annual renewal fee to be fixed by the Council from time to time, with the sanction of the Privy Council, or pending the fixing of such fee by the Council, a fee of twenty shillings, which shall be payable on or before the Thirtieth day of November, in each year, in respect of the year commencing on the First day of January of the following year.

(a) The registration fee shall cover the annual fee for the first year or a part of a year during which it is paid.

Examining body.

21. Examinations under this Act shall be held by a Board of Examiners appointed by the Council or other body appointed by the Privy Council under Section 14 of this Act.

(1) The standard of proficiency required from candidates at the said examinations shall be such as sufficiently to disclose the possession of sufficient knowledge and skill for the practice of architecture, and it shall be the duty of the Council to secure the maintenance of such standard of proficiency as aforesaid ; and for that purpose such number of inspectors as may be determined by the Council shall be appointed, and shall attend, as the Council may direct, at all or any of the examinations ;

(2) Inspectors of examinations appointed under this section of this Act shall not interfere with the conduct of any examination, but report thereon to the Council ;

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* Schedule "D" is not printed with this Draft.

(3) The members of the board or boards of examiners, and the inspectors of examinations appointed under this section of this Act shall receive such remuneration, to be paid as part of the expenses of the Council, as the Council, with the sanction of the Privy Council, may determine, and the Council shall defray such other reasonable expense as may be incurred in holding such examinations;

(4) Such reasonable fees shall be paid to the Council by Candidates for examination under this Act as the Council may from time to time direct.

Evidence of qualification to be given before registration.

22. The name of a person shall not be entered on the register unless the Registrar be satisfied by proper evidence that the person claiming is entitled to such entry; and any appeal from the decision of the Registrar shall be decided by the Council, and any entry which shall be proved to the satisfaction of the Council to have been fraudulently or incorrectly made may be erased from the Register by Order in writing of such Council.

Register to be published.

23. The Registrar shall in every year cause to be printed, published, and sold under the direction of the Council, a Register of the names, in alphabetical order, according to the surnames, with the respective addresses, in the form set forth in Schedule "E"* to this Act, or to the like effect, of all persons appearing on the Register as existing on the First day of May in every year, and such Register shall be called "The Architects' Register," and a copy of such Register for the time being, purporting to be so printed and published as aforesaid, shall be evidence in all courts and before all justices of the peace and others, that the persons therein specified are registered according to the provisions of this Act; PROVIDED ALWAYS that in the case of any person whose name does not appear in such copy, a certified copy under the hand of the Registrar of the entry of the name of such person in the Register shall be evidence that such person is registered under the provisions of this Act.

Registered persons may have titles of distinction added.

24. Any person registered under this Act who may have obtained any title of distinction, considered by the Council to be worthy of notice, shall be entitled to have such distinction inserted in the Register.

Penalty on unregistered persons using title, etc.

25. From and after the first day of January, One thousand nine hundred and fifteen, a person shall not be entitled to take or use the name or title of Architect (either alone or in combination with any other word or words, save only that of Naval Architect), or any name, title, or description implying that he is registered under this Act, unless he be so registered.

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* Schedule "E" is not printed with this Draft.

Any person who, after the above date, not being registered under this Act, takes or uses any such name, titles, or description, as aforesaid shall be liable, on summary conviction, to a fine not exceeding Twenty pounds, and on repetition of the offence Fifty pounds.

Meaning of term "legally qualified practitioner."

26. After the first day of January, One thousand nine hundred and fifteen, the words "legally qualified Architect," or any words implying a person recognized by law as a practitioner in architecture, when used in any Act of Parliament, shall be construed to mean a person registered under this Act.

None but registered persons to recover charges.

27. After the first day of January, One thousand nine hundred and fifteen, no person shall be entitled to recover any charge in any court of law for any professional services rendered as Architect in respect of instructions received subsequent to that date, unless he is registered under this Act.

PROVIDED ALWAYS that nothing in this Section shall be held to prejudice the right of professional Members of the Institution of Civil Engineers, the Institution of Municipal and County Engineers, the Institute of Municipal Engineers, the Society of Engineers, the Institute of Civil Engineers of Ireland, the Surveyors' Institution, or the Quantity Surveyors' Association, and such other body and bodies as the Council may from time to time approve with the sanction of the Privy Council, to recover charges for work of any kind falling within the duties of their calling.

No Certificate to be valid unless persons signing be registered.

28. After the first day of January, One thousand nine hundred and fourteen, a Certificate required by any Act now in force, or that may hereafter be passed, from any Architect shall not be valid unless the person signing the same be registered under this Act.

Penalty for obtaining Registration by false representation.

29. If any person shall wilfully procure or attempt to procure himself to be registered under this Act by making or producing, or causing to be made or produced, any false or fraudulent representation or declaration, either verbally or in writing, every such person so offending, and every person aiding and assisting him therein, shall be deemed guilty of a misdemeanour, and shall, on conviction thereof, be imprisoned for any term not exceeding twelve months.

Penalty on wilful falsification of Register.

30. A Registrar who shall wilfully make or cause to be made any falsification in any matters relating to the Register shall be deemed guilty of a misdemeanour, and shall, on conviction thereof, be imprisoned for any term not exceeding twelve months.

Notice of death of practitioners.

31. Every Registrar of deaths in the United Kingdom, on receiving notice of the death of any person registered under this Act, shall forthwith transmit by post to the Registrar a Certificate under his own hand of such death, with the particulars of time and place of death, and may charge the cost of such Certificate and transmission as an expense of his office, and on the receipt of such Certificate the Registrar shall erase the name of such deceased person from the Register.

Recovery of penalties and fees.

32. All fees under this Act may be recovered as ordinary debts due to the Council, and all penalties under this Act may be recovered and enforced as follows (that is to say): In England before two or more justices of the peace, in manner directed by the Summary Jurisdiction Act, 1848, and any Act amending the same; and in Ireland, within the police district of Dublin metropolis, in manner directed by the Acts regulating the powers and duties of justices of the peace for such district, or of the police of such district, and elsewhere in Ireland, before two or more justices of the peace in manner directed by the Petty Sessions (Ireland) Act, 1851, and any Act amending the same; and in Scotland, before the sheriff or sheriff's substitute, or two justices, in manner provided by the Summary Procedure Act (1864), and any Act amending the same.

14 & 15 Vict. c. 93.

27 & 28 Vict. c. 53.

(1) Any sum or sums of money arising from conviction and recovery of penalties as aforesaid, shall be paid to the Treasurer of the Council.

Services of notices by post.

33. Subject to the other provisions of this Act, all notices and documents required by or for the purposes of this Act to be sent, may be transmitted by post, and shall be deemed to have been received at the time when the letter containing the same would be delivered in the ordinary course of post; and in proving such sending it shall be sufficient to prove that the letter containing the notice or document was prepaid and properly addressed and put in the post.

Registration of Colonial practitioner.

34. On and after the passing of this Act, where a person shows to the satisfaction of the Registrar that he holds some recognized Colonial diploma or diplomas (as hereinafter defined), granted to him in a British Possession, and that he is of good character, and that he has practised architecture in such British Possession, he shall, on application to the said Registrar, and on payment of such fee not exceeding Five pounds, as the Council may from time to time determine, be entitled without examination in the United Kingdom, to be registered, provided that he proves to the satisfaction of the Registrar any of the following circumstances :—

(1) That the said diploma or diplomas was or were granted to him at a time when he was not domiciled in the United Kingdom, or in the course of a period of not less than Five years, during the whole of which he resided out of the United Kingdom; or

(2) That he was practising architecture in the United Kingdom at the time of the passing of this Act, and that he has continuously practised the same, either in the United Kingdom or elsewhere, for a period of not less than Five years immediately preceding the passing of this Act.

Registration of foreign practitioner.

35. On and after the passing of this Act, where a person shows to the satisfaction of the Registrar that he holds some recognized Foreign diploma or diplomas (as hereinafter defined), granted in a foreign country, and that he is of good character, and that he has practised architecture in such foreign country, he shall, on application to the said Registrar, and on payment of such fee not exceeding Five pounds, as the Council may from time to time determine, be entitled without examination in the United Kingdom to be registered, PROVIDED that he proves to the satisfaction of the Registrar any of the following circumstances:—

(1) That he is not a British subject; or

(2) That, being a British subject, the said diploma or diplomas was or were granted to him at a time when he was not domiciled in the United Kingdom or in a British Colony or British Possession, or in the course of a period of not less than Five years, during the whole of which he resided out of the United Kingdom; or

(3) That, being a British subject, he was practising architecture in the United Kingdom at the time of the passing of this Act, and that he has continuously practised the same in the United Kingdom or elsewhere for a period of not less than Five years immediately preceding the passing of this Act.

Diploma of Colonial and Foreign practitioner when deemed to be recognized.

36. The diploma or diplomas granted in a British Possession or any Foreign country to which Sections 34 and 35 of this Act apply, which is or are to be deemed such recognized Colonial or Foreign architectural diploma or diplomas as is or are required for the purposes of this Act, shall be such diploma or diplomas as may be recognized for the time being by the Council as furnishing a sufficient guarantee of the Possession of the requisite knowledge and skill for the efficient practice of architecture in this country.

PROVIDED ALWAYS that if the Council shall in any case consider any such diploma or diplomas to be insufficient, the Council may require the holder thereof to prove his knowledge and skill by serving such a period of architectural education, and by passing such examinations as the Council may think necessary.

Default of Council and examining body or bodies. 37. IF at any time it appears to the Privy Council that the Council or the examining body or bodies has or have failed to exercise any power or perform any duty, or do any act or thing vested in or imposed on, or authorized to be done by the Council; or by the examining body or bodies, the Privy Council may notify their opinion to the Council; and if the Council, or the examining body or bodies, fail to comply with any directions of the Privy Council relating to such notification, the Privy Council may themselves give effect to such directions, and for that purpose may exercise any power or do any act or thing vested in or authorized to be done by the Council, or by the examining body or bodies, and may of their own motion do any act or thing which they are authorized to do in pursuance of a representation or suggestion from the Council.

Exercise of powers of Privy Council. All powers vested in the Privy Council by this Act may be exercised by any two or more of the Lords and others of His Majesty's Most Honourable Privy Council.

(1) Any act of the Privy Council under this Act shall be sufficiently signified by an instrument signed by the Clerk of the Privy Council, and every Order and act signified by an instrument purporting to be signed by the Clerk of the Privy Council, shall be deemed to have been duly made and done by the Privy Council, and every instrument so signed shall be received in evidence in all courts and proceedings without proof of the authority or signature of the Clerk of the Privy Council or other proof.

Orders evidence. 38. The following copies of any orders made in pursuance of this Act shall be evidence (that is to say) :—

(1) Any copy purporting to be printed by the King's printer, or by any other printer, in pursuance of an authority given by the Council;

(2) Any copy of an order certified to be a true copy by the Registrar, or by any other person appointed by the Council, either in addition to or in exclusion of the Registrar, to certify such orders.

Definitions. 39. In this Act, unless the context otherwise requires :—

The expression "British Possession" means any part of His Majesty's Dominions, exclusive of the United Kingdom, but inclusive of the Isle of Man, and Channel Islands, and where parts of such Dominions are under both a central and a local legislature all parts under one central legislature are for the purposes of this definition, deemed to be one British Possession;

The expression "registered practitioner" means any person for the time being registered under this Act;

The word "diploma" means any diploma, degree, fellowship, membership, associateship, license, authority to practice, letters, testimonial, certificate, or other status or document granted by any university, professional body, college, or other body, or by any departments of or persons acting under the authority of the Government of any country or place within or without His Majesty's Dominions;

The word "person" includes a body of persons corporate or not corporate, and the masculine gender includes the feminine gender.

SCHEDULES.

SCHEDULE "A."

1. Sheffield Society of Architects and Surveyors.
2. Leicester and Leicestershire Society of Architects.
3. Manchester Society of Architects.
4. Glasgow Institute of Architects.
5. Northern Architectural Association.
6. Bristol Society of Architects.
7. Nottingham and Derby Architectural Society.
8. Royal Institute of Architects of Ireland.
9. Liverpool Architectural Society.
10. Birmingham Architectural Association.
11. Leeds and Yorkshire Architectural Society.
12. Devon and Exeter Architectural Society.
13. Dundee Institute of Architecture, Science and Art.
14. York and Yorkshire Architectural Society.
15. South Wales Institute of Architects.
16. Aberdeen Society of Architects.
17. Edinburgh Architectural Association.
18. Northamptonshire Association of Architects.
19. Hampshire and Isle of Wight Association of Architects.
20. Bradford Society of Architects.
21. Wolverhampton Association of Architects.
22. Preston Society of Architects.

Provincial Architects & the Society's Registration Bill.

At a Meeting of the Council of the Devon and Exeter Architectural Society, held on January 16th, the following resolution proposed by Mr. J. Jerman, F.R.I.B.A., and seconded by Mr. Allan J. Pinn, A.R.I.B.A., was unanimously passed :—" That this Society having always approved of the principle of Registration, now approves of the Bill as drafted by The Society of Architects."

The following resolution was unanimously passed at the Annual General Meeting of the Shropshire Architectural Association held at Shrewsbury, on the 10th inst., on the proposition of Mr. Frank Shayler, F.R.I.B.A., seconded by Mr. V. G. Santo, A.R.I.B.A. :—" That we, the members of the Shropshire Architectural Association, having considered the draft Bill for the Registration of Architects prepared by The Society of Architects, do give it our most cordial support, and undertake to do our utmost to further its interest, and that a copy of this resolution be sent to the Press, the Secretaries of the R.I.B.A. and The Society of Architects, and also to the five Members of Parliament representing Shropshire, requesting their support of the Bill when presented to Parliament."

Some Criticisms on the Society's Registration Proposals.

The Registration Bill to be presented to Parliament early in the coming Session has now been published by The Society of Architects. It differs mainly from the Bill of 1903, which was the last one to be presented, in condensation and simplification, the general principles remaining. All architects in bona-fide practice at the passing of the measure are to be permitted to register, and in future Registration is to be limited to such as have been properly educated and have proved their qualifications by passing proper examinations ; but whereas, under the former Bill, education was compulsorily to take the form of articles, the alternative of spending a part, at least, of the stipulated time in approved architectural colleges or schools is now granted, the precise form which the required education shall take being open to variation by the Council, as times change. Both Bills would provide a General Council for the disciplinary government of the profession, and for maintaining the Register ; but under the older Bill there were also to be Branch Councils for Scotland and Ireland. These are no longer mentioned—there is no necessity for them now that means of communication have improved, especially in so small a profession as that of architecture is.

In length the Bill has been reduced from 44 to 39 sections ; but a few schedules have been added as forms for application for Registration, which have to be made as statutory declarations—a wise provision against the possibility of there being fraudulent applications. It also seems to have been found necessary to increase the list of bodies whose members, in spite of the measure, are to have the right of recovering charges " for work of any kind falling within the duties of their calling," and it is even recognized that the list may need further extension, either now or hereafter, for power is taken to add " such other bodies as the Council may from time to time approve, with the sanction of the Privy Council." This should go far to save the Bill from extraneous opposition.

More is to be feared from within the profession. The decision taken by the Institute to proceed, so far as itself is concerned, by Charter and not by Bill, precludes that body from actively supporting the Bill now being introduced. On the other hand, the Institute can now hardly oppose the Bill with any sense of honour. The profession almost unanimously demands Registration ; the Society is promoting a Bill which would bring this about in the sense understood in other professions, completely and once for all. The Institute is adopting a course which, while doing something, is neither complete nor final, though it acknowledges the demand for a thorough-going measure. Lacking the necessary courage as yet to go forward itself to finality, it can hardly obstruct another body which is endeavouring to do so, without laying itself open to the charge of acting from motives of self-expediency and not for the general good.—*The Building News.*

After a period of discussion and doubt, the position of the Institute has been made clear and definite by the unanimous approval of a resolution proposed by Sir Aston Webb, who stated that, although he had, with others, not been in favour of it originally, he recognized that Registration was the wish of a great majority of the profession, and they had considered it their duty to join in trying to carry out the wishes of the general body. He explained the present position by saying that the Institute had been told by their legal advisers that there was not the smallest chance of passing a Registration Bill in Parliament, owing to the opposition of Engineering and other interested bodies and the difficulty of making out a public case, proving that without the statutory Registration of architects the health or welfare of the community would suffer.

The Institute are further advised that, if they proceeded with a Registration Bill, it would be most important to secure the support of a Government department such as the Board of Education or Board of Trade, and there is no reason to suppose that such support would be forthcoming.

These conclusions have sufficed to convince the Committee, the majority of whose members are strong Registrationists, that Parliamentary Registration is impossible in the present condition of things ; but they consider that the grant of a new charter, which only requires the sanction of the Privy Council, would enable them to obtain many of the advantages claimed for Registration.

The details of the proposed new charter and questions as to the status of different classes of members are left for future discussion, but we are satisfied that a satisfactory basis has now been reached.

The Registrationists have not executed a *volte-face*, but have, like wise men, been content to obtain what is within the bounds of possibility rather than lower the esteem of the public by fruitlessly attempting the impossible.

All but a very small number of the provincial societies have expressed their agreement with the Council's attitude, and there only remains outside The Society of Architects, who are determined to proceed with a Bill of their own in the ensuing session. Should their efforts, contrary as far as we can see to all expectation, prove successful, we shall congratulate them on having the courage of their opinions ; but if they are convinced after the first actual experience of Parliamentary proceedings that they have over-estimated their strength we hope that they, too, will fall into line and be satisfied with what it is possible to attain. Harmony and agreement among architects as the real essentials are, we are convinced, the consummation devoutly to be wished.—From *The Builder*.

For a long time many members of the architectural profession have been on the look-out for an antidote—not an antidote to the dulness of our imagination nor to the inadequacy of our equipment as artists, but an antidote to the difficulty of making architecture a safe and lucrative profession. We fear that many architects desire to shelter themselves behind safeguards for the exclusive and profitable exercise of their art.

The antidote was first supposed to have been found in establishment by registration. The Society of Architects with great ability and energy have endeavoured to bring this about, but after twenty-five years are no nearer the goal than ever.

Now the R.I.B.A., at its unanimous and enthusiastic meeting on Monday night, have definitely thrown registration (as an immediate issue) overboard, and instead, now propose to do what they can for the profession by revision of their charter, although by this they do not fling a definite barrier across the path of those who choose to remain outside.

Our opinion is that the action of the Institute on Monday night averted a disaster to the whole profession. Presumably the new charter will be so wide and comprehensive that it will not be so beneficial to the inner circle of the profession as the former one, but will be infinitely better than a Registration Bill, as propounded by The Society of Architects. Still, it is enough to confound the stoutest enthusiast and optimist when one realizes the vast amount of sheer incompetence which will be covered by such a measure of protection as that now contemplated.

We yield to none in sympathy with those who cannot make a living by honourable means (such as the practice of architecture) ; but we maintain that the flower of art will never live and thrive in a hothouse chiefly filled with plants having greedy roots, swallowing up the nourishment needful for the more delicate and really valuable growths.

The old controversy : "Is architecture a Profession or an Art ? " stands out now more prominently than ever. If it is not an art, nor mainly concerned with art, let us at once be done with all our foolish pretensions, and dub ourselves what we really are.

The architect has to deal with hard facts, with difficult matters of construction and material, and if his work is to be distinguished by any quality that adds to the beauty and joy of life, he needs more than anyone else an enthusiasm and a belief in the supreme importance of the artistic side of things. When he is chartered or registered there will be no more guarantee that he can add to the sum of art in the world than he could before. What in Heaven's name are the public going to gain by registration ? Will they get better art ? Emphatically no. Do they want better art ? Most of them, no. But what has this to do with the architect ? Art is a thing which it must be his aim to cherish and promote. The public cannot be protected in this direction. They cannot be made to long for art by labelling men, from whom they may make a choice, as architects. As a matter of art *qua* art, the whole situation is absurd to the last degree.—*The British Architect.*

We have received a proof, subject to revision, of the draft of a Bill to provide for the registration of architects, redrafted December, 1913, to be promoted in Parliament by The Society of Architects. In face of all that has been said against its chances, one may be permitted to wonder why this is still to go forward. The omnium gatherum of those who are to be taken as qualified to be registered as architects, as given in Clause 19, is sufficiently appalling. One wonders how long it will be before the title of registered architect would ever be taken to convey any real distinction.—*The British Architect.*

The draft of a Bill to provide for the Registration of Architects is now being circulated by The Society of Architects. We confess that we should take greater interest in the details of this capably constructed draft if we felt any real expectation that the Act would " commence and take effect from the first day of January, 1915," or within any conjecturable period of time ; as it is, the sectional character of the movement, as we have previously pointed out, militates against the serious consideration of the Bill by an over-busy Parliament. However, the Bill's provisions may be summarized as follows : There will be created a " Council of Architectural Education and Registration of the United Kingdom," consisting of persons nominated from time to time by His Majesty with the advice of his Privy Council, and of architects chosen by the Councils of the R.I.B.A., The Society of Architects, and the Irish Royal Institute. Members of the Council shall be chosen and nominated for not more than five years, and other clauses provide for the election of a President, a Registrar, and other officers ; the time and place of meeting of the Council, and the revision of its constitution when deemed necessary ; the allowances to Councillors and the application of fees in payment for registration or from other sources ; the publication of the Council's transactions and accounts ; and the duties of the Registrar. The crux, of course, of the Bill is reached in Clause 19 ; " Persons qualified to be registered." The latter are to include Fellows, Associates, and Licentiates of the R.I.B.A., and professional members of The Society of Architects, together with any person practising as an architect in the United Kingdom and Ireland before January 1st, 1915, such person being required to sign a declaration on oath to that effect. There is also a form of declaration for apprentices, assistants, etc. Even at the present theoretical stage, the excessively liberal provisions of the Bill in regard to qualifications are sure to meet with strenuous opposition.—*The Architects' and Builders' Journal.*

The Bill (The Society of Architects') is at present only in draft, and most vitally important figures are left blank. Under the provisions of the Bill the control of the registration of architects is to be in the hands of a Council to be styled "The Council of Architectural Education and Registration of the United Kingdom." This Council is to consist of ". . . . persons nominated from time to time by His Majesty, with the advice of his Privy Council; and the architects chosen from time to time by each of the following bodies: . . . . by the Council of the Royal Institute of British Architects; . . . . by the Council of The Society of Architects, founded 1884; . . . . by the Council of the Royal Institute of Architects, Ireland; and . . . . architects hereinafter referred to as 'direct representatives,' who shall be elected by registered practitioners."

The figures with which the blanks are to be filled are obviously most vitally important, and until they are settled it is futile to expect support from any of the bodies named—other than the Society—or from the Allied Societies of the Royal Institute. It will be noticed that the nominees of the Privy Council need not under the terms of the Bill be architects. They are only required to be "persons," and may outnumber the architect members.

A vital defect in the Bill is that although it constitutes a "Council of Architectural Education," empowered to appoint a Board of Examiners and inspect and review its proceedings, there is no reference to the Universities or other educational bodies. The Bill will, therefore, inevitably be opposed by the Universities, who cannot be expected to submit entirely to outside dictation as to the courses of instruction they are to conduct. The Universities do not need to offer formal opposition in the Committee rooms; they possess sufficient influence in the Lobby to kill the Bill.

Persons qualified to be registered are defined by the Bill as firstly members or licentiates of the Royal Institute, members of The Society of Architects, "professional" members of the allied societies of the Royal Institute and of architectural societies in Bradford, Wolverhampton and Preston. Has The Society of Architects, by the way, purged itself of all its non-professional members, or are they to be specially favoured beyond those of other societies? Secondly, any person actually practising architecture in the United Kingdom on the first day of January, one thousand nine hundred and fourteen, and still so practising on the first day of January, one thousand nine hundred and fifteen, or who has served as apprentice, assistant, or practitioner in architecture, all or either, for five years in the aggregate prior to the first day of January, one thousand nine hundred and fifteen, and after having attained the age of seventeen years.

Here we come to the Scylla and Charybdis of registration. Parliament will not sanction a Registration Bill that does not provide for vested interests. There are a number of eminent architects who will not consent to being placed on the same register with everyone who to-day calls himself an architect, or who may even be "actually practising architecture," in a legal sense, on January 1st of this year. We know of at least half a dozen of these eminent architects, any one of whom has sufficient influence in the Lobby to kill the Bill.

The third class of persons to be registered under the Bill are those who have "gone through a satisfactory course of architectural education in a manner approved by the Council" and "passed such examination or examinations as the Council shall authorize."

It is not a difficult matter, if one does not mind the cost, to get a Bill introduced in Parliament, but it is just as easy, in the present condition of Parliamentary business, and far less expensive, to kill it in the Lobby; so, strongly as we are still in favour of the principle of registration, we cannot regard the chances of the Society's latest Bill as other than hopeless, for the reasons we have already expressed, and it is therefore useless to discuss further the terms of the Bill, some of which are amusing. —*The Architect and Contract Reporter.*

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More than thirty years ago, the need for some form of registration had become keenly felt. At that time the Royal Institute of British Architects, the representative body of the profession, was strongly opposed to registration in any shape or form. It is true they favoured the principle of an examination, or the test of executed work, as a condition precedent to admission to their own body. The leading lights of the Institute, comprising the greater number of the most eminent men in the profession, looked upon registration with disgust, as an attempt to trammel and hamper a calling whose chief function was not the exercise of professional or administrative functions, but the expression of artistic ideals in brick and stone. Theoretically they were absolutely right; but they were the leaders of the profession in London, the largest practitioners, and some, be it noted, were remarkably good business men in the handling of their affairs. They never really felt the pinch of unqualified competition, as did their humbler suburban and provincial brethren.

Then was born The Society of Architects, composed of men who felt the need for, and demanded registration. In season and out they laboured for that end. Now they are a fairly numerous, powerful and influential body, numbering many members of the Institute in their ranks.

The passing of the thirty years has brought about changes of men and of thought. Now the Institute is overwhelmingly in favour of registration, though many leading architects still look upon registration with dislike and distrust. A few years ago the Institute proposed to absorb the Society, an amalgamation which only fell through by reason of minor differences. Year by year unqualified competition has become keener and more daring.

The present situation is, that the Institute, arguing upon the experience of the Society, holds that to get a Bill passed in the present state of politics, or in the near future, is hopeless, and a mere waste of time. We are inclined to agree with this view. The Society several times got a Bill introduced, only to find it blocked. The Institute now proposes as a compromise—and the English love compromise—to obtain a new Royal Charter, constituting a general architectural council, and, broadly speaking, enacting that only those who satisfy the Institute of their fitness to practice shall be admitted to the Institute, and to the right to style themselves "chartered architects." We believe such a charter would do little good. The pushing commercial architect might fancy the added distinction to his note heading, but one can hardly fancy, say, the late Norman Shaw, or George Frederick Bodley, for instance, emblazoning their scripts with the magic words. The majority of men who practise their calling in the true spirit, are satisfied to be architects, and it would take a good deal to persuade some of them to adopt what certainly looks like professional fancy dress, albeit many of them have in self-defence, and feeling the keen pinch, become converted, not to registration as an ideal, but as a necessity forced upon them.

The Society regards the present attitude of the Institute as an abandonment of the fight ; it is now once again courageously pressing forward and has secured the introduction of the Registration Bill in the House of Lords next session. That the new Bill will meet with more happy fortune than its martyred elder brothers, its most sanguine sponsor will hardly dare to hope. The fact is, no Bill of the kind can be passed without Government support, because it will be blocked by opponents and by assailed vested interests, even in the shape of unqualified architects ; and no Government will lend official support to a private measure that is open to the charge of creating or fostering a monopoly, and has not even the unanimous support of the profession, unless it can be shown that such monopoly is essential to the health and well-being of the community, as, for instance, in the case of medical doctors, dentists, and midwives. The effort to show this on behalf of architecture has been made without success, and until public taste becomes so artistically educated as to see the folly of permitting architectural enormities to be perpetrated so as to disfigure our streets, or fully realizes the value of an architect's calling, we shall hardly see registration. Yet events move very rapidly nowadays, and there is no telling what a day may bring forth ; so we think the Society is to be congratulated on its courage and resolution in sticking to its principles in face of great difficulties, and we wish it every success.—*The Irish Builder and Engineer.*

Ordinary Meeting.

The Third Ordinary Meeting of The Society of Architects for the Session 1913-14, will be held at 28, Bedford Square, London, W.C., on Thursday, February 12th, at 8 p.m.

Agenda :—

1. Minutes.
2. Nominations and Announcements.
3. *Paper on "Buildings for Small Holdings," by Mr. A. Ainsworth Hunt (Member).

The Membership.

Resigned.—S. Doddimeade Edmunds, Reading, *Member.* Douglas James, Victoria, B.C., *Student.*

Deceased.—Rev. G. F. Burr, Halesowen, *Member.*

Lapsed.—A. T. Davies, London; W. A. Gittins, Welshpool; J. A. Howell, Oxford; J. M. Jevons, Tipton; E. G. Manktelow, London; F. A. Priestley, London; S. F. Walker, Ripley. *Students.*

Reinstated.—Samuel T. T. James, London, *Member.*

Elected.—A. H. Holmes, Aylesbury; W. J. Isaacs, Warrington; J. Knight, Manchester; J. Nangle, Sydney, N.S.W.; W. J. Price, London; Albert Smith, London. *Members.*

Travelling Studentship Competition, 1914.

The following questions and answers are published for the information of intending competitors :—

1. *Q.* Are there no covered or open yards to be provided in conjunction with the "cow sheds"?
   A. The "open barns" allow for this.
2. *Q.* Is the "milking room" to be used for the animals' sleeping accommodation, etc., and fitted with mangers, etc.?
   A. Not for sleeping, but is to be fitted with mangers.
3. *Q.* Are the "open barns" only for shelter or for the animals' sleeping accommodation as well?
   A. For shelter and temporary sleeping accommodation in rough weather.

Competitors are advised to inspect a good modern model dairy if possible. Particulars of the competition will be found in the current *Year Book*, and in the December *Journal.*

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* Advance copies may be obtained from the Secretary.

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The Society is not, as a body, responsible for the opinions expressed by individual authors and speakers.

" Cup " and " Chalice."

Referring to the terms " cup " and " chalice " in the paper on " Church Plate," by Mr. Christopher A. Markham, F.S.A., read before The Society of Architects, and published in *The Architectural Review* for January, Mr. J. L. Bissley expresses the opinion that Mr. Markham's suggestion that " chalice " was probably retained to meet some parish where a chalice was in use is indefensible. As a matter of fact, in the historical sense " chalice " and " cup " mean one and the same thing. If anything, however, " chalice " is the more proper expression. Mr. St. John Hope, to whom Mr. Markham refers, will, he thinks, bear out this statement.

Mr. Markham states in reply, that the word " chalice " is a French word, and is derived from a Greek word of similar meaning. The word is defined by Dr. Johnson as a cup or bowl; therefore, the words are for many purposes synonymous. Previous to the Reformation the vessel used at High Mass was always known as a " chalice," and was not then administered to the laity. Afterwards, when the laity partook of the wine, it was always or almost always known as a " cup."

Mr. Markham quotes a number of distinguished writers who considered that the proper term is " cup." It is true he says that Mr. J. E. Nightingale in his book on *The Church Plate of Wilts and Dorset* always used the word " chalice " ; but in one of the reviews of these books it was pointed out that this was an improper use of the word. He thinks that the word " cup " was almost exclusively used after the Reformation, and that it is, therefore, correct at the present time.

Proceedings.

The Third Ordinary Meeting of The Society of Architects, for the Session 1913-14, was held at 28, Bedford Square, London, W.C., on Thursday, February 12th, 1914, at 8 p.m.

Mr. Percy B. Tubbs, F.R.I.B.A., President, having taken the Chair, it was resolved that the Minutes of the last Ordinary Meeting, as printed in the *Journal*, be confirmed and signed.

Eleven nominations for Membership were announced, and a ballot was taken for the election of the following Candidates to Membership, and was declared to be unanimously in their favour.

BHOWNAGGREE. NASSERWANJI MANCHERJI MERWANJI,	163, Cromwell Road, S.W.
GLASS. MARCUS KENNETH,	7, East Parade, Newcastle-upon-Tyne.
HINCHLIFFE. PERCY ARCHIBALD,	14, Regent Street, Barnsley.
HUNTER. JAMES DOUGLAS,	39, Great Marlborough Street, Regent Street, W.
SCHOFIELD. ALBERT,	Queen's Chambers, Weld Road, Birkdale, Lancs.

The following elections by the Council were announced :—

Register of Graduates.

TRANMER. FRANK,	Westminster Chambers, Harrogate.

Register of Students.

FRASER. BRIGHT,	16, Trafalgar Road, Egremont, Cheshire.
SMITH. THOMAS HAROLD,	"Thirlmere," Ferrybridge Road, Castleford.
WYNNE-JONES. NEVILLE,	17, Woodlands Terrace, Swansea.

Mr. A. Ainsworth Hunt (Member), then read a paper on "Buildings for Small Holdings," and a discussion ensued in which the following took part: Messrs. H. Freyberg, C. Chart, S. Salisbury, Dr. Biggott, W. J. Pulford, J. Herbert Pearson, Noel D. Sheffield, S. T. T. James, Alwyne Tutton, and the Chairman. A hearty vote of thanks was accorded to the lecturer, and the proceedings terminated.

TEE SQUARE AND TANGO.

The Society's Cinderella Dance, held at the Connaught Rooms on February 4th, was a very enjoyable function. Some keen supporters were unfortunately prevented from coming, and consequently the hall was not so crowded as it would otherwise have been. The arrangements made were very much appreciated by those present, and thanks are due to the M.C., Mr. E. J. Sadgrove, and the Stewards. There was a very good programme of dances and quite a number of members showed themselves to be as proficient at the Tango as they are known to be with the Tee-Square.

Buildings for Small Holdings.

By A. Ainsworth Hunt (Member).

Member of the Departmental Committee of the Board of Agriculture on Buildings for Small Holdings.

MY purpose in addressing you this evening is to bring before you some of the recent developments affecting the Buildings which have been or should be erected for Small Holdings.

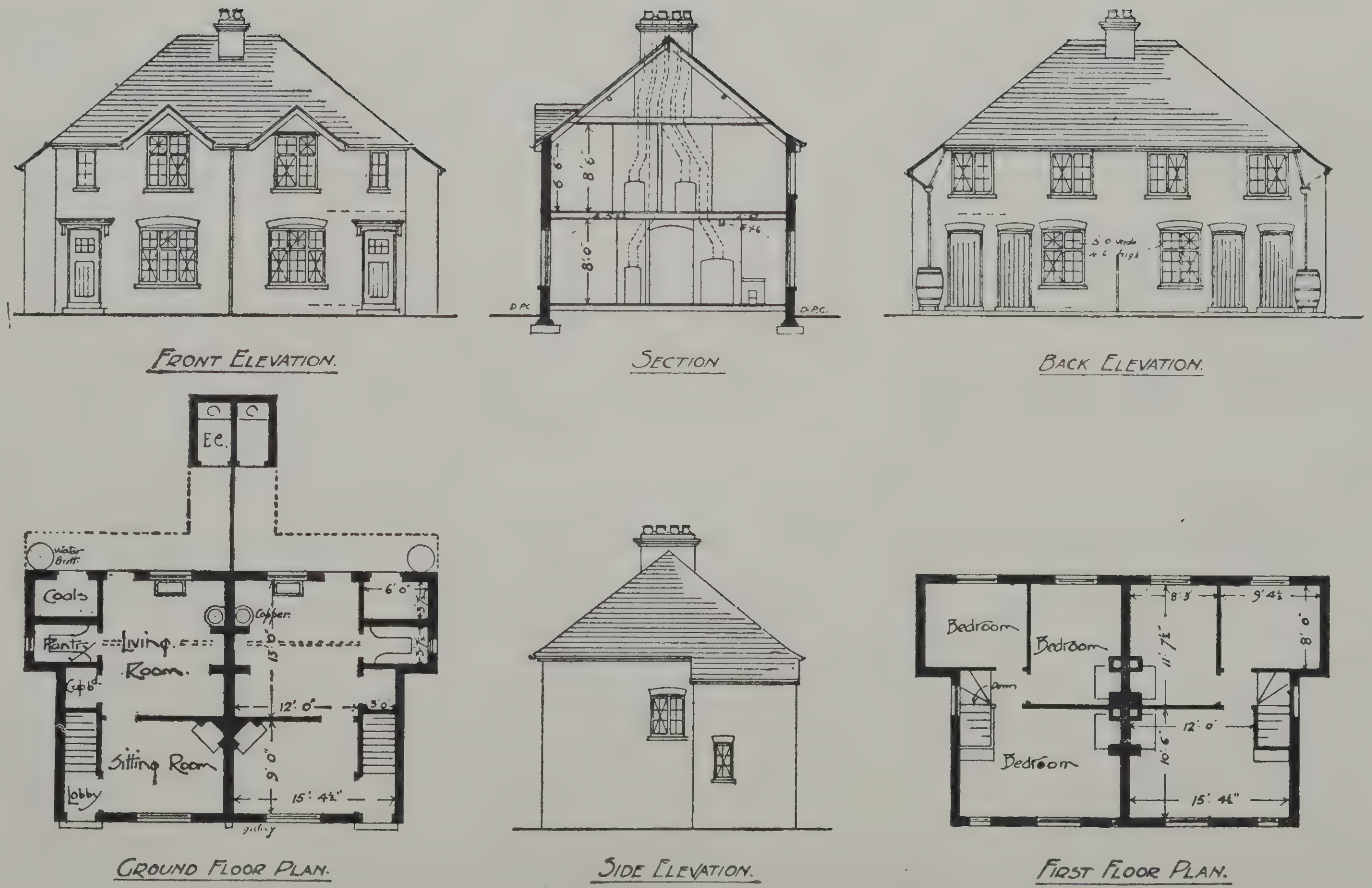
We are passing through a period of general unrest, far reaching in its influence. The architect meets with this in many ways. With the introduction of motive power in the production of all kinds of commodities, the old mills and factories are being pulled down, and modern structures erected in their place, but a large number of the agricultural buildings are in much the same condition as they were at the beginning of the last century.

The decay of agriculture in England, has, without doubt, been one of the most marked features of the present generation.

Cities and towns have grown by leaps and bounds, while the countryside seems more and more neglected. The population of the world is increasing fast, and every country is demanding more food. Agriculture should, therefore, be an important industry in every country. All the continental nations are endeavouring to re-organize their agricultural systems, and are spending large sums to improve them. In 1912, England spent £220,000 in helping this Industry, whilst France spent £2,000,000. Even a small country like Holland spent £30,000 more than we did. Signs are not wanting that England is at last beginning to realize the grave danger of her scanty food supply, and the necessity of giving more attention to agriculture. With the improvements that are taking place in all methods of cultivation, it is reasonable to suppose that the architect will be called upon to plan farm houses and suitable buildings.

Partly with a view to offering an inducement to keep some of our healthy young people on the land, and partly to help solve the problem of our food supply, the Small Holdings Act was passed in 1908, and in spite of the opinions of many of the large farmers and land owners that it would fail, in most districts it is working well, and some of our best manhood which would have drifted into the towns, or perhaps, left the country, are now making a good living on the land.

When the Small Holdings Act was first introduced, there were no regulations as to what should be provided in the way of buildings, with the result that each County Council or its adviser was a law unto itself. Some of the earlier buildings erected are not very suitable, some are too large and expensive and planned without due regard to their requirements.



PLAN OF COTTAGES FOR SMALL HOLDINGS OF 5 TO 10 ACRES.

A. AINSWORTH HUNT, M.S.A.

Erected in various parts of West Suffolk at prices ranging from £310 to £345 per pair.

To obviate this in future, the Board of Agriculture appointed the Departmental Committee on Buildings for Small Holdings, of which I had the honour to be a Member. The duties of the Committee were generally to consider the most suitable houses and buildings to be erected on small farms of fifty acres and under.

In the course of our investigations, we visited small holdings in various parts of the country. Although, we saw some buildings which certainly were very carefully thought out, the experience we gained from these visits was principally *what to avoid*. Some of the Committee also visited Sweden, where farming is conducted on much more scientific principles, and is decidedly more profitable.

The farmers in some of the continental countries get much more value out of their land than we do, and this is largely owing to the industry and intelligence of a class which corresponds to the small holders in this country.

Some of the dairy farmers in Denmark and South Sweden estimate that they make about £5 to £8 per acre, per annum, out of their land. From what I have seen of these countries, I am of the opinion that their land is no better than ours, their climate not so good, and their means of transport are not equal to ours. Why, therefore, under more favourable conditions, should not English farmers do the same ?

The matter for our consideration this evening is chiefly concerned with the question of the most suitable buildings for small farms or small holdings. The great problem in the proper equipment of a small holding is to provide, at the smallest cost, buildings which will be suitable and sufficient for the holdings concerned, but not in excess of their practical requirements. Insufficient or unsuitable equipment must lessen the productive capacity of the holding, while on the other hand, excessive equipment must represent so much dead weight upon it, and involves the occupier in expenditure for which he can get no real return.

Problems in Planning.

The first question to be considered in planning a set of buildings is : What is the land expected to produce ?

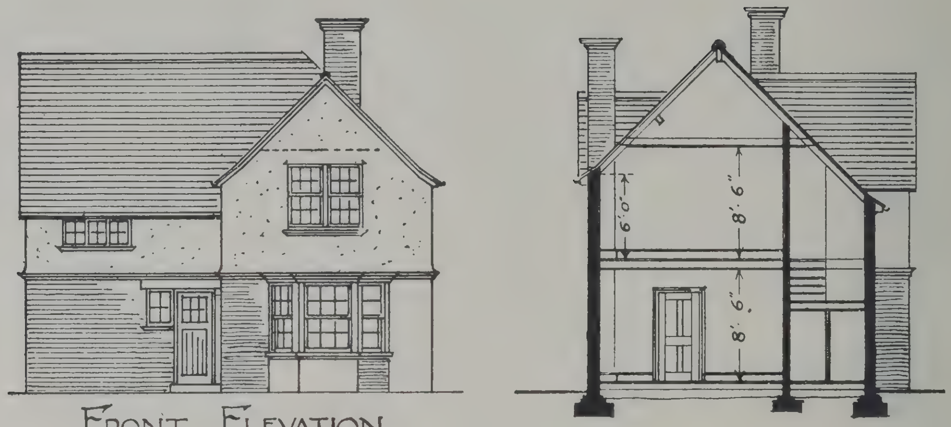
Speaking generally, I think the buildings should be divided into three groups. (1) Market Gardening ; (2) General farming ; (3) Dairy farming.

The houses for each of these classes of Holdings can be much the same, but the farm buildings must be especially arranged for the special purpose for which they are required.

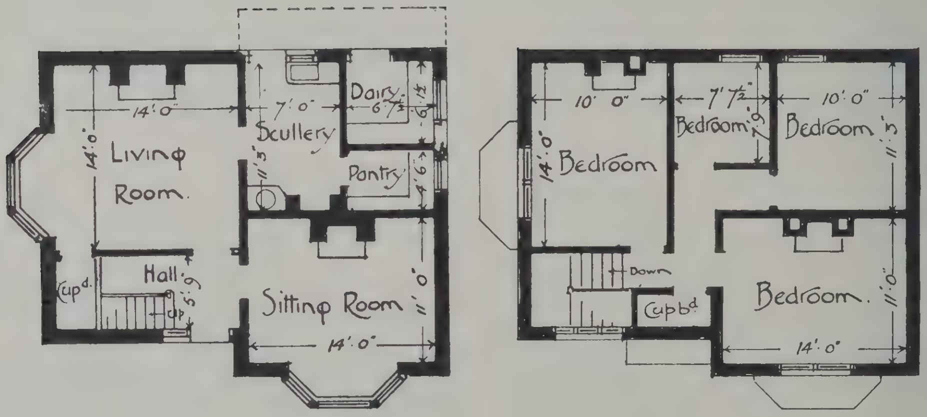
The House.

The class of house to be erected must necessarily depend somewhat on the size and nature of the holding.

For a holding of, say, ten acres or under, which is not used as a market garden, a house of the nature of a labourer's cottage will be quite sufficient.



FRONT ELEVATION. SECTION



GROUND PLAN FIRST FLOOR PLAN.

Cottage on Small Holding at West Row, Mildenhall.
A. Ainsworth Hunt, M.S.A.
Erected in 1911. Cost £250.

This should contain: Living Room or Kitchen, 15 ft. by 12 ft.; Scullery, 8 ft. by 10 ft.; Larder, 6 ft. by 4 ft.; three Bedrooms, 12 ft. 6 in. by 12 ft., 11 ft. by 9 ft., 9 ft. by 8 ft.

This arrangement may be varied by providing a small parlour and a combined living room and scullery. I will deal with this point again later.

An earth closet should be provided situated away from the main building, and a good fuel store, at least 7 ft. by 5 ft.

As the holding increases in acreage, the size of the house must be increased also. A holding of twenty-five acres should have a sitting room or parlour.

This house would then contain: Parlour, 12 ft. by 10 ft.; Kitchen, 13 ft. by 15 ft.; Scullery, 10 ft. by 9 ft.; Larder, 6 ft. by 4 ft.; Fuel Store, 7 ft. by 5 ft. Three or perhaps four bedrooms: No. 1, 12 ft. by 13 ft.; No. 2, 12 ft. by 10 ft.; No. 3, 10 ft. by 10 ft.; No. 4, 9 ft. by 8 ft.

In addition to the above, on most holdings a dairy will be required, the minimum size of which should be 5 ft. by 8 ft. This would only be sufficient for two cows. If the holding is to be devoted principally to dairy farming, the size of the dairy must be increased proportionately.

In considering the planning of the house, the general conditions of house planning will apply, but I should like to draw particular attention to one or two points.

The Kitchen or Living Room.—This is the room in which the family will mainly live. It should, therefore, have the best aspect, which should be South or South-East, even if there is a parlour provided, for experience shows that the kitchen will be always in use, but the parlour only occasionally. Most careful attention should be given to the position of doors and windows. The cooking range should be in this room. It should also contain a good dresser and cupboard. In many districts it is usual to provide a tiled floor.

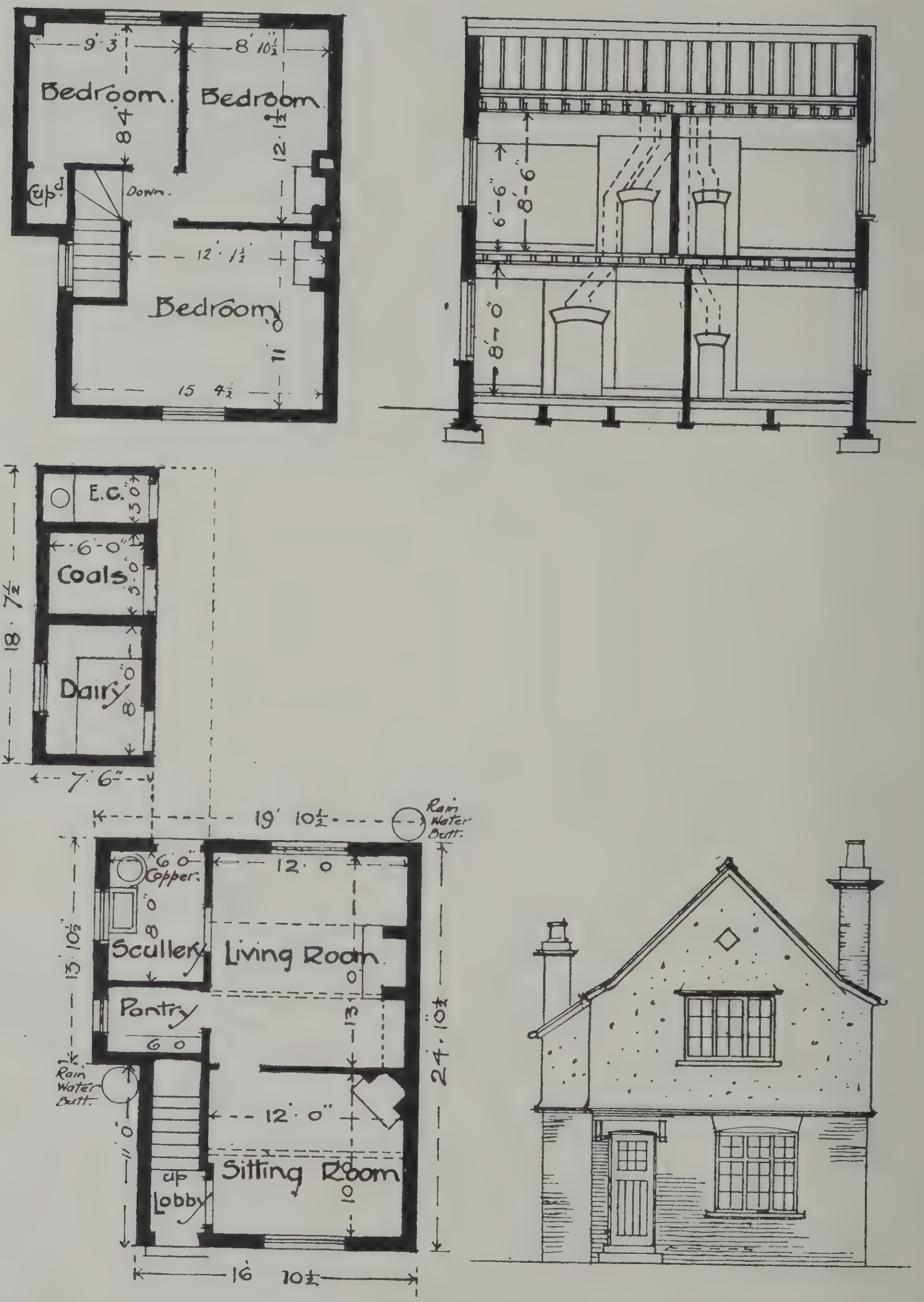
The Scullery.—In the Scullery most of the dirty work of the house is done. This should contain the sink, copper and a small fireplace for occasional use in summer. It is not necessary to put a proper stove in the fireplace opening. A few bars across the front and a grating at the bottom are all that are necessary; as wood is generally burnt in the Scullery. It is also advisable to put a brick oven, so as to encourage the baking of bread at home.

A scullery should not be made too large, or it is likely to be used as a living room.

The door of the scullery must be so placed as to give easy access to the farm yard, and the kitchen or scullery window should command a view of the farm yard, so that the wife may see what is going on out there, when the husband is away on the land.

Care should be taken to see there is a suitable place for wash tubs, mangle, etc. It is also very desirable that a bath should be provided, if a water supply is available.

The Larder and Fuel Store.—These require to be made larger than those of the average small town house. In the larder, a larger stock of provisions has to be kept, as shopping is not very convenient in the country.



Proposed Cottage on Small Holdings at Beyton.
A. Ainsworth Hunt, M.S.A.
In course of erection. Contract £200.

There should be storage room for all kinds of home-made provisions, and a barrel of beer, also room for salting pans for bacon, as these cannot be kept in the dairy.

In the fuel store, provision must be made for wood as well as coal. It should be borne in mind that in the country coal can seldom be obtained economically in very small quantities.

The Dairy.—On most small holdings, a dairy will be required as one or two cows are almost certain to be kept, to provide milk and butter for the family. Under no circumstances should the dairy open into any room in the house, and it must always be quite separate from the larder. It must be well ventilated and lighted, have a North window if possible, and all means of ventilation should be fitted with fly-proof wire gauze.

The floor should be tiled or stone, with proper means for washing same. The shelves should be of slate, and not fixed quite close to the walls.

The Bedrooms.—In planning the bedrooms, it is important to see there is a suitable place for the beds. A point so often overlooked in cottage construction!

In the large bedroom, provision is required not only for a double bed, but frequently for one or two cots.

The Parlour.—The question of a parlour in very small houses is a point upon which there is a great difference of opinion. Some people assume that a parlour is not necessary.

During the last few years, I have erected several different sets of cottages and provided a large living room, and put a cooking range in it, and a small scullery containing the copper and sink. I have generally found on inspecting these when occupied, that the living room is furnished as a parlour, and the family lives in the scullery, no matter how small it may be.

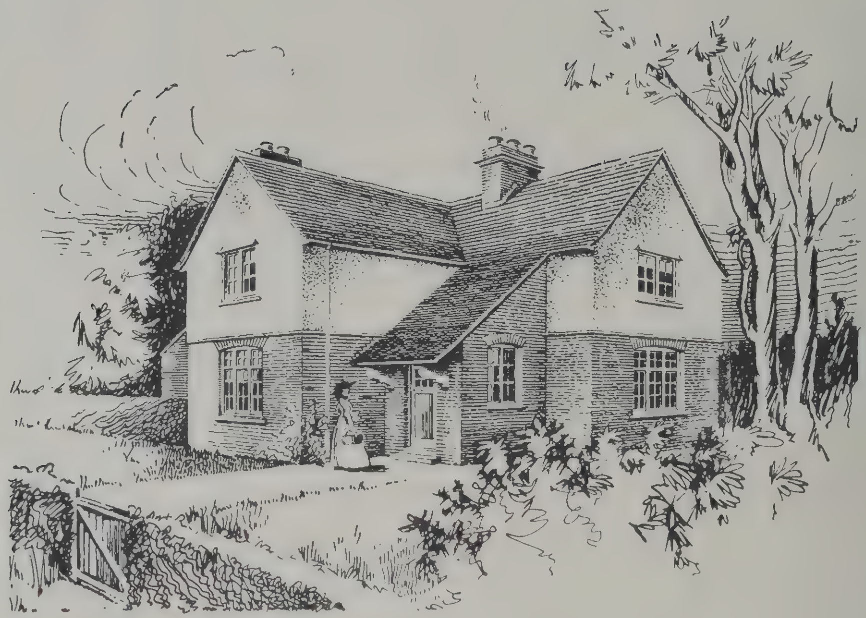
Personally, I am inclined to think that for country cottages where only two rooms are provided, it will be much more appreciated by the poorest family if a small parlour is provided, and a large combined living room and scullery, which would then contain the cooking stove, sink and copper, but in this case the copper should be fitted with a patent steam consuming apparatus.

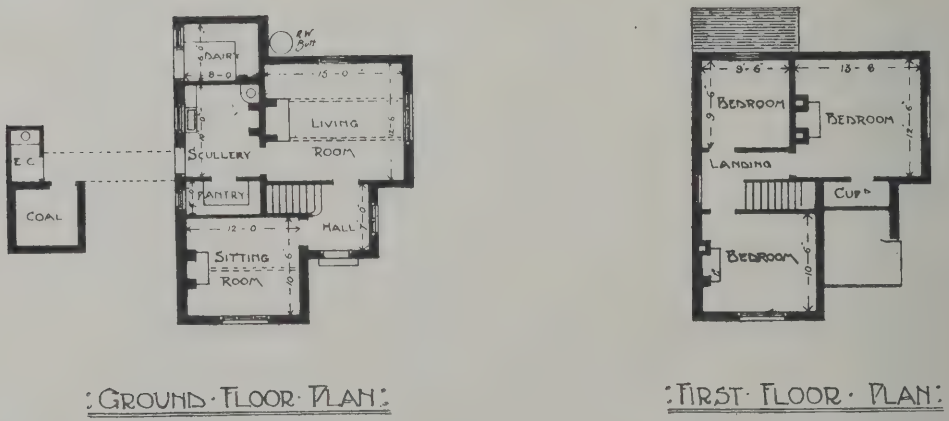
The sizes of the rooms would then be: Parlour, 12 ft. by 9 ft. 6 in.; Living room, 12 ft. by 13 ft.

It is difficult to alter the habits of the labouring classes by providing rooms for them which they will not use as they should.

Even the agricultural labourer generally has a few small articles of furniture which he specially values, and likes to display them in his "Best Parlour," as he generally terms it. A certain amount of house pride may be beneficial in keeping the home neat and tidy.

I have several sets of cottages in the course of erection now, where I am providing a small parlour, and a large combined living room and scullery. I am sorry they are not yet completed, to enable me to give my experience of them.





:GROUND·FLOOR·PLAN: :FIRST·FLOOR·PLAN:

COTTAGES FOR SMALL HOLDINGS, UNDLEY, WEST SUFFOLK.
A. AINSWORTH HUNT, M.S.A.
In course of erection. Contract £250 each.

When three living rooms are provided in the larger type of house, a room 12 ft. by 10 ft. 6 in., will be quite large enough for the parlour, and will give a fair size second bedroom over it.

Wash Houses.—In some districts a wash house is required away from the house, separated from the scullery. On a small farm, a building of this description serves other useful purposes, such as a store for cycles, perambulators, etc. If a separate wash house is erected, it is not a bad plan to provide two coppers, one for the family laundry and the other for boiling food for cattle, it being obvious that one copper cannot serve the two purposes.

The Structure of the House.—In deciding on the structure of the house, much must depend upon the local materials at hand, but the building should be of such a nature as to ensure the minimum of expenditure in subsequent repairs and upkeep. Economy should therefore be sought by careful planning and construction, and not by undue cutting down of the size of the room, or the quality of the materials, workmanship and fittings. In selecting materials, preference should always be given to those which belong to the district. In cases where bricks are used, expensive facing bricks of even colour are not required, good sound, common bricks of a texture that will weather well are preferable in every way.

In some cases it may be necessary to provide cavity walls, or use the cheaper kinds of bricks, and rough cast them.

The old-fashioned method of giving a wide projection to the eaves and gables will materially assist in keeping the walls dry, but the gables should not have an expensive barge board and timber work which is costly in upkeep, in the way of painting. The height of the rooms on the ground floor should be 8 ft. from floor to ceiling, and the bedrooms 6 ft. 6 in. to the springing of roof, and 8 ft. 6 in. to the collars of the ceiling.

The Floors.—The most economical floors are concrete, and will do very well for the scullery, pantry and dairy. The kitchen or living room floor should be generally of good red tiles on concrete, but in some districts there is a prejudice against this. A considerable amount of mud is brought into the house at times, and tiles are much easier to clean than boarded floors.

If a boarded floor is used, it is likely to be covered with linoleum, and this has a tendency to encourage dry rot, especially on new floors.

Windows.—The simplest and most economical window is the Yorkshire slide, and if oak sills with oak pegs are used instead of the retaining fillet, they are very durable.

Casement windows come next in the matter of simplicity, but care should be taken to see that a sufficient amount is made to open, especially above the transom,

THE SITE AND DRAINAGE.

In choosing a site, the cost of the scheme will depend very much on the facilities for water supply and drainage. Where available, land should be chosen which will allow of the houses being placed so that the ground will fall away from them, particularly at the back, where slop water has to be dealt with.

In some districts it is not usual to provide drains or even a sink. The slop water is simply thrown on to the land, but this has a tendency to cause a nuisance near the house.

The best means of dealing with the slop water from a small Farm is to put the usual sink and gulley, and a length of drain, say, 20 ft. to 30 ft. from the house, and from this point lay a few lines of field drains, if the soil is suitable, radiating from a point from where the glazed drain stops. The liquid can then easily be distributed where required.

Another method is to sink the land immediately adjacent to the outlet, and provide a galvanized iron tank on wheels, the distribution of the water over the land can then be easily carried out.

If the ordinary cesspool is provided, it is usually not water-tight, with the result that it is liable to percolate into the subsoil and polute any well near. If it should be water-tight it results in the slop water remaining in the cesspool until it becomes offensive, and then there is a large quantity to deal with at one time, upon the same area of ground.

WATER SUPPLY.

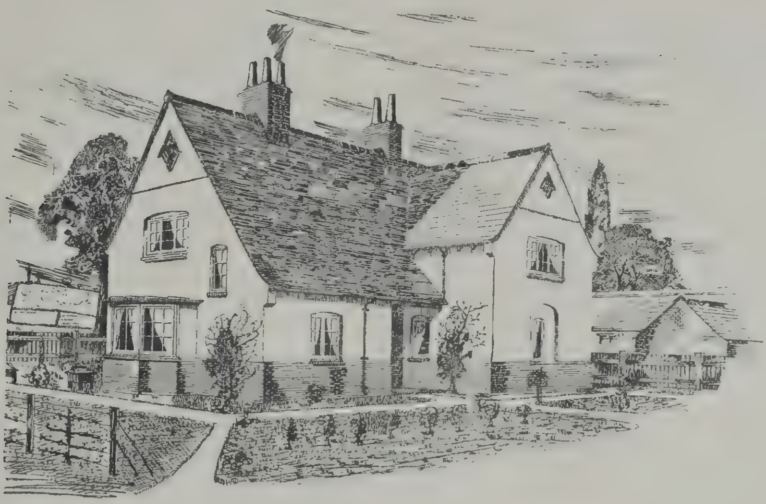
The provision of a good water supply is absolutely necessary foı a small farm.

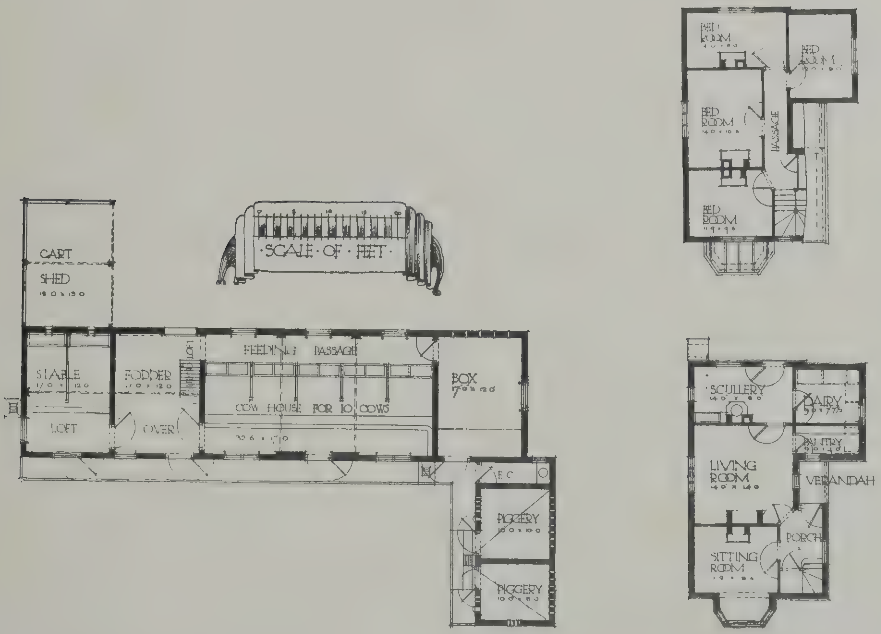
The cost of a deep well is generally prohibitive, unless it is intended to supply a group of Small Holdings.

When water can be found at a reasonable depth, a shallow well will generally be sunk into the water bearing stratum, but it is essential to guard against any risk of contamination. The well should be lined with bricks or concrete, and made water-tight to a sufficient depth to prevent the percolation of surface-water into it.

In some district where there is no water-bearing stratum at an available depth, recourse must be had to the storage of rain-water for domestic purposes.

In that case a strong storage tank must be provided. This should be built of brickwork or concrete, and made thoroughly water-tight, so as not only to retain the water, but exclude any surface water. The top should be domed over much the same as an ordinary well, an overflow pipe should be provided, and this as well as the outlet should be protected by grids to exclude vermin. Arrangements should be made to exclude the first flush of rain water from the tank, as this will not generally be very clean.





Homestead on a Small Holding at Bushbury.
John M. Hotchkiss, County Land Agent, Stafford.

COST OF HOUSE.

The maximum amount spent on the house should never exceed £350, and on the buildings, £400, as this with interest, sinking fund, repairs, management expenses, etc., on a fifty years' loan will be equal to a rent of 5½% or £41 5*s.* 0*d.* per annum, which is as much as a Small Holder on the maximum of fifty acres can afford to pay.

THE FARM BUILDINGS.

In considering the nature and character of farm buildings necessary to meet the convenience and requirements of Small Holders, it is obvious that the difficulty of laying down definite rules is even greater than in the case of houses. The House may be much the same, whatever the nature of the holding, but the farm building must be specially planned to meet the requirements of the particular holding concerned.

In planning the buildings, allowance should be made for the possibility of future extension, and the type of buildings provided should be capable of being added to without much difficulty, only the minimum of accommodation should be provided at the outset. If the tenant is consulted beforehand, care must be taken not to provide equipment in excess of what the Holding can produce, for he will generally take a rather extravagant view of his requirements, without realizing the extra amount of rent or interest involved.

The smallest type of Buildings are those required for market gardening or fruit growing.

The requirements for this will be: A packing shed; Fruit Store; Stable and Cart Shed; A rough Shed for Tools and Artificial manure.

A very good timber building of this class could be erected for about £100.

ARABLE HOLDING OF 20 TO 30 ACRES.

The equipment for a holding of this character can be very simple, and would contain the following: Fodder and Chaff House, 14 ft. by 15 ft.; Stable for two Horses, 12 ft. by 15 ft.; Cattle Shed, 14 ft. by 18 ft.; Cart Shed, 14 ft. by 18 ft.

For holdings of larger size, the chief additions would be the provision of loose boxes, cow stalls, and possible stabling for an extra horse.

An extra loose box is a great convenience. It can be used for so many purposes, for calves, pigs, or a sick animal. The general opinion amongst modern farmers is that the old-fashioned pig sty should not be built. Pigs do much better in a loose box, and should have the run of the yard or a field. It is a good plan to provide a low platform of wood upon which the pigs can lie. This should be portable, so that it may be moved when the box is required for other purposes.

All stables should have floors of grooved concrete or grooved paving bricks, and laid with a good fall. Care should be taken to see there is proper ventilation without draught.

Barn floors should be of concrete, or preferably of wood.

Cart sheds should have backing rails and guard posts.

The stables, cow houses, cattle sheds, etc., should be readily accessible from the barn or mixing house, so as to save labour in carting fodder.

It is most important that stock yards should be sheltered from the North and East winds, and at the same time open to the sun and air. The buildings are therefore, best planned L-shape, and placed backing to the North and East. All the doors and windows should be on the South and West, and opening into the yard. The cattle will thus, when in the yard, get all the sun and be protected by the buildings from cold winds.

Loose boxes should open if possible into the cattle or crew yard, and it is very desirable that a portion at least of the crew yard should be covered, not only to shelter the stock, but also to avoid the continual washing of the manure by rain, and to economize straw. The superiority of manure from a covered yard is such that its use will considerably lessen the bill for artificial fertilizer.

It will be a great advantage if a granary or loft can be constructed over a portion of the building, preferably over the cart shed, fodder house or mixing room. The extra expense will be very small, and a boarded floor is much better for storing grain, cake, etc.

Dairy Farming.

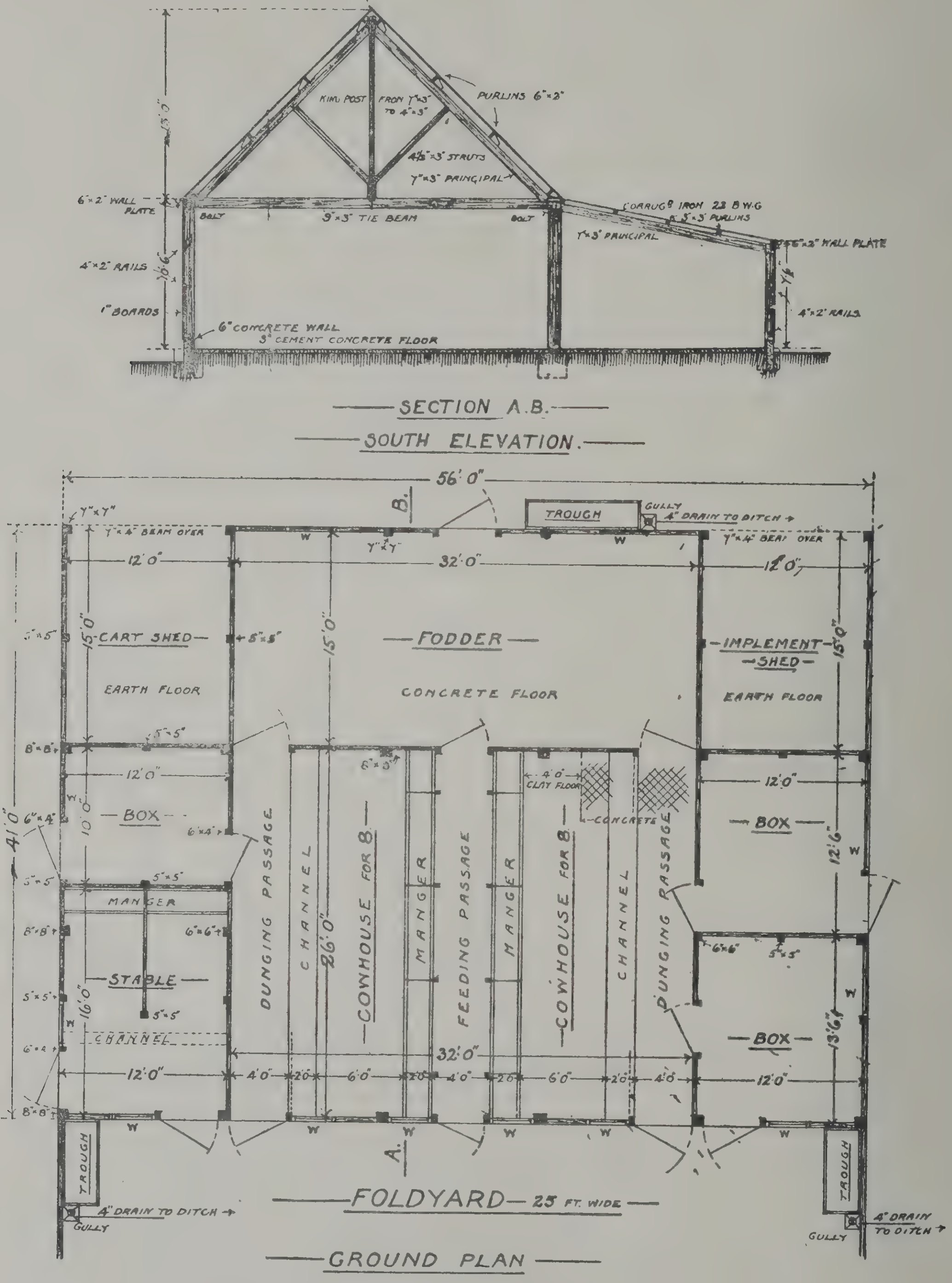
The main object on a holding of this description is to provide sufficient cow houses at the lowest possible cost. The cost will work out at about £10 per stall if built of brick and tile, and £6 or £8 if built of timber.

Cowsheds must comply with the requirements as to cubic space laid down by any regulations adopted by local authorities under the Dairies and Cowshed and Milk Shops Order. The usual minimum space prescribed is 800 cubic feet per cow, in cases where they are habitually kept in the building, and 600 feet where they are turned out for part of the day. The lower figure will be quite as much as is necessary on a farm. In calculating the cubic space, it is usual not to allow anything above 12 ft. in height above the ground line.

The lighting of cow sheds is a matter of great importance, as good lighting is one of the essentials for clean milking. The simplest method is by glass tiles in the roof, but windows should also be provided both for light and ventilation. The space admitting light should not be less than 2 square feet per cow.

The cow shed should have a grooved concrete floor, but rammed clay or chalk for a width of 4 ft. from the manger will make a more comfortable surface for the cows to kneel on, and will help to prevent swollen knees.

The gutter should be formed in the concrete with a roughened surface. It should be 2 ft. wide and 6 in. deep, with a fall of 1½ in. to the gangway, and a semi-circular channel for liquid formed at the back about 3 in. wide. The gutter should have a fall of ½ in. per yard, and discharge 6 in. beyond the wall, with glazed pipes. A grid should be fixed at the end to prevent solids entering the drain. The drain from the gulley should lead into a liquid manure tank, which should be water-tight, and fitted with either a loose top or a pump.



Building for Dairy Holding of 50 Acres.

The feeding trough should be a semi-circular trough, formed of concrete or glazed stoneware, and should be continuous in length so that it can easily be cleaned out, and if supplied with tap or pump at one end, and a waste at the other, it will make a good water trough as well.

Arrangements for tying cows are required, but all other fittings, including stall divisions are superfluous.

Allowing 3 ft. 6 in. per standing for cows will be quite sufficient, so that 12 cows in a line will require a building 42 ft. long. The width will be 14 ft. to 15 ft. as follows: Feeding trough, 2 ft.; standing, 6 ft.; gutter, 2 ft.; gangway, 4 ft. or 5 ft.; preferably the latter.

Where there are less than twelve or fourteen cows, a feeding passage is not necessary, but one is often provided as it is a convenient way of obtaining the prescribed amount of cubic space in the cow house.

It is important in all farm buildings to keep the horses and cows well separated, as any odour arising from the stable is liable to put the cows off their feed, and consequently affect the milk.

In some parts of the country there is a great prejudice against drains of any sort for farm buildings, the liquid manure is run into the yard, which is littered down from time to time to soak up the moisture.

If drains are provided, they should all be collected together and run into a manure tank. This should have a pump fixed at a good height from the ground (so that a cart may be backed under it), and the liquid manure pumped into it, for carting to the land.

If a Small Holding should be situated in any district which is sewered, *the liquid manure should never be run into the drains as by that means it would be wasted.*

CHEAP WOODEN BUILDINGS.

A class of farm Buildings which is being largely used now is provided with what is known as the open (or Yorkshire), boarded roof.

These are generally wooden buildings on brick or concrete foundations, with stud walls, weather-boarded outside. The roof is covered with boarding laid at right angles to the purlins, each board being grooved on the top about 1 in. from the edge, and fixed with a space of about $\frac{1}{8}$ in. between each board. A roof of this description looks as if rain will simply pour through it, but it does not.

In constructing the walls, three sides must be completely closed in, and a portion of the south side left partly open. This causes a slight upward current of air, and prevents any rain coming through the joints between the boards. The barn and chaff house should be kept at one end of the building, and this portion should be tiled or slated.

This class of buildings is most economical in construction and very healthy for cattle, being warm in winter, and cool in summer. They are most suitable for large cow houses.

In conclusion, I would point out that it is impossible to lay down any definite regulations to suit particular buildings, as agriculture and the method of living differs very considerably in various parts of the country.

I should just like to mention here that with regard to the visit the Departmental Committee paid to Sweden, we were unable to gain much experience from the planning of houses, as the Swedish habits differ from the English, as regards their mode of living.

The Swedish custom is to provide fewer rooms, but larger in area than the English, and the use of combined living and sleeping rooms with shut-up beds is very common.

From a constructional point of view, their roofs are very interesting. The rafters are generally spaced 3 ft. 9 in. apart, and boarded on top, wall plates and ridges are seldom used. The timbers, though thoroughly seasoned, are very inferior in quality to those generally used in England.

The farm buildings are much more extensive than those on a holding of corresponding size in this Country, but their character and arrangement are much more applicable to English conditions than is the case with the houses, though the severity of the Swedish winter necessitates much greater barn accommodation. Nearly all the stock yards are covered, partly to protect the stock, and partly to prevent the manure being washed.

Architects and County Land Agents should pay particular attention to small holdings for the next few years, as large sums of money will inevitably be spent upon them; and it is only by care in planning every detail with special reference to the need of the localities concerned and the industry in question, that the small capitalist can make a living upon his holding.

DISCUSSION.

THE PRESIDENT in proposing a hearty vote of thanks to the lecturer, said that the latter had given them a most interesting and instructive Paper, which might almost be termed a hand-book on the subject. It would be interesting to know if the Small Holder farmed well or whether he got all he could out of the land without putting anything back, leaving it to the Local Authorities or the Land Owner to put it right afterwards. Mr. Hunt had exhibited some very interesting plans, and had given useful advice, particularly in regard to the use of local materials, which was essential to make cottages harmonize with their surroundings. An important point in cottage building he thought, was to cut down the amount of wood used so as to economize the up-keep as much as possible, and bedrooms should be planned so that a bed could really be put into them. The question of cottage design was very much to the fore just now, and was probably one of the most difficult with which architects had to contend, in the face of the fact that the cost of building was altogether out of proportion to the rent which the tenant could afford to pay. He had been very interested in the reference to the Yorkshire boarded roofs, which appeared to be more or less a sieve and yet water-tight.

MR. S. T. T. JAMES (Member), in seconding the vote of thanks, said that the lecturer had not made any reference to the desirability of collecting the rain water from roofs of small holdings, thereby effecting a considerable saving in the cost of sinking wells. He had drank rain water in many parts of the world, without ill-effect. As a rule in rural districts the rain water was allowed to run into tubs and so rendered useless except for garden or washing purposes. The collection of rain water was made a simple matter, by using covered galvanized tanks ; whatever sediment there was would fall to the bottom, and if a tap was placed about a foot above, a good supply of drinking water would be obtained.

MR. H. FREYBERG, F.S.I. (Member), said the paper which would form a valuable addition to their *Journal*, and would be much appreciated, particularly by their members in the provinces. Rain water was not only not preserved in many rural parts, but was allowed to become a danger to health. He had recently constructed a large underground water tank, on a country estate, the cost of which added very considerably to the expense of the buildings. He enquired whether in designing buildings for a market garden some form of glasshouse should not be provided with heating apparatus in order that the holder might be able to gain an income all the year round.

DR. BIGGOTT (Visitor), said the problem of the collection of rain water for drinking purposes was a great one in rural areas. They frequently found that the arrangements got into such a disgusting condition that one felt very disinclined to recommend it. The supply too was very often intermittent. It was, however, a pity to waste the rain water, especially in a district where well water was very hard ; and some effort should be made to retain as much as possible. He would be very pleased to hear whether anyone had had any experience in small sewage installations such as suggested by Mr. Hunt. With regard to the household waste, Mr. Hunt advocated a sink with a movable receptacle underneath. In the event of an overflow the mess was cleared up; whereas, if it were placed outside the house and the waste carried through, no notice was taken of the overflow. Medical men liked to see large windows through which plenty of light and air could flow. It was part of the crusade against consumption to teach the value of fresh air and sunlight, and it would be very much better if they could do without windows altogether.

Mr. W. J. Pulford (Member), said he did not agree with Mr. Hunt in advocating the use of wood for barn floors. His experience went to show that floors constructed of that material were very soon infested with rats, and wood was not at all necessary as no threshing was done in barns nowadays. The Dairy, the lecturer had told them, should never open into the scullery, but in cheese making this arrangement had been found most essential. Gutters, six inches deep in the cow houses had often proved dangerous to the cows, and six feet standing room was, in his opinion, too much for cows. Ample space, however, should be provided between the animals, as they had been known to injure themselves through insufficient room to move. The difficulty with regard to the detention of rain water, was to keep it sweet and wholesome to drink, especially where tiles were used for roofs. With regard to the use of concrete for building purposes, they would be interested to know that a complete holding would be erected in that material for exhibition at the Royal Show.

Mr. J. Herbert Pearson (Member of Council), said that no reference had been made to the use of galvanized iron for farm buildings, and very little to the drainage of stables. Were they to understand that for small holdings it was preferable to lay the drains inside the stables, as such a method was contrary to London practice ? Everyone acknowledged the importance of admitting fresh air and sunlight into their buildings, but there was a certain limit, inasmuch as if they provided windows of too large an area in comparison with the size of the room, they found the room was very cold in winter and very hot in summer. The speaker enquired how many hands were required to work a farm of say 50 acres, and what was the cheapest kind of bricks which the lecturer suggested should be used for the buildings. Mr. Hunt had also suggested that tile or stone floors should be provided, and the speaker asked whether in each case the material was laid on concrete or rubble. It would also be interesting to know what was the average life of the wooden buildings.

Mr. Noel D. Sheffield (Member of Council), referred to the use of linoleum as a covering for wood floors, and suggested that the material might be put down direct upon concrete at a considerable saving. With regard to the rain water storage, he had found that with a 120 gallon covered-in tank, if not used for two or three days, the water became very offensive. He wondered whether their present views about ventilation would some day have to be abandoned. Eminent men in the medical profession had said that it was not so much the quality of the air that was so essential as its movement. It was possible to survive a very confined atmosphere, so bad in fact that a light would not burn, provided the air was kept constantly in motion.

Mr. Christopher Chart, F.S.I. (Member), said that the lecturer had stated that continental farmers obtained more value from their land than those in England, which, he thought was due not so much to their additional energies as to the capacity for organization and co-operation which was such a feature in Denmark for instance. The use of wood as fuel depended upon the neighbourhood, and if a brick oven were put in, the size of the scullery would have to be increased. He had found that in the summer months it was useless to depend upon the rain water supply, even from a considerable roof area. With regard to the use of concrete for cottage building, he thought that the cost of the frames was too great to justify the carrying out of a building entirely in concrete, but it could be done successfully and economically if the ground floor were built of concrete and the upper part in brick. He had seen linoleum used as a covering for concrete, and it seemed very satisfactory. For cow sheds in a surburban district where the cows were kept entirely under cover, he invariably put in stall divisions with two cows in each stall.

Mr. Alwyne Tutton (Member), asked whether any Member had had experience with concrete blocks of very small thickness for building purposes, and how the bye-laws in rural areas affected such forms of construction. Architects as a rule did not make much use of them, but he believed the construction was simple and satisfactory. Ordinary labourers made the blocks with the aid of a simple machine, and they ought to be considerably cheaper than ordinary concrete, as no boarding was required.

Mr. Stanley Salisbury (Member), referred to the value of the projecting eaves of buildings, both from an æsthetic and utilitarian point of view. The value of depth in cottage architecture had not been mentioned, and they sometimes failed to realize how much charm a country cottage was capable of producing in a very economical and effective manner.

The vote of thanks was then put to the Meeting and carried with acclamation.

Mr. A. Ainsworth Hunt in reply, thanked the Members for their appreciation, and said that he thought the small holdings in his district were carried on upon right lines, inasmuch as the selection of the holder was left largely to the Small Holdings Committee, who were mostly farmers themselves, and they and the County Land Agent kept a very sharp eye on the farm. In very few cases indeed had it been found necessary to evict a tenant. With regard to the collection of rain water there was a great difficulty in keeping the water sweet enough for drinking purposes. In some cases he had provided filters, which through not being cleaned often enough became themselves the source of further contamination. The Local Government Board insisted upon a sufficient water supply being provided for small holdings which sometimes necessitated the expenditure of a very considerable sum to supply even one cottage. They did not as a rule provide any glass buildings, as in the case of a market gardener he would be expected to find his own glass which would be more or less a movable structure. With regard to the house drainage, people in the country who had not been used to drains very soon blocked them up. In Sweden and Denmark they never put drains to small houses as it was considered a waste to run all the household refuse into the drains; they thought it more beneficial to distribute it over the land.

Most farmers preferred the barn floor to be of wood, as it was better for grain and cake. That was why he had advocated its use in preference to concrete. With regard to the construction of cow houses, the details he had given as to the amount of standing room, and so forth, were taken from the Departmental Committee's Report, and were the result of the inspection and measurement of cow sheds all over the country and in Sweden. They had heard a great deal about concrete blocks, but he thought that form of construction had several disadvantages, more especially that it is so often not weather proof. With regard to the effect of bye-laws on the use of concrete blocks, in Suffolk there were very few bye-laws.

Galvanized iron could only be used for cart sheds and occasionally for covering a barn. Its use, however, affected the length of the loan allowed by the Local Government Board, who gave twenty-five years if galvanized iron were used, and thirty-five years where tiles were substituted, so that it was more economical to use the better material.

As to the number of hands required to work a 50 acre farm, much would depend upon the nature of the holding, probably not more than two or three except in the case of a holding used for market gardening.

He had not referred to stone floors because he did not come from a stone district, but he had often used tiles upon concrete with some success. Some people had a prejudice against putting linoleum direct upon a concrete floor, thinking that it was cold, but there was no reason for it; he had suggested it for the County Council Offices erected a few years ago, but the Council would not hear of it. Wood was used for fuel in almost every scullery, and was obtainable on every farm. The use of coal was prohibited by its high cost in many districts.

He agreed that projecting eaves made a great difference artistically, but he had dealt with the matter from the practical side. With regard to co-operation, continental farmers undoubtedly co-operate more than the English do. It was hoped in time to educate the Small Holder to see the advantage of this system.

Buildings for Small Holdings.

At the meeting of The Society of Architects held last night the members were privileged to hear an excellent paper by Mr. A. Ainsworth Hunt on the important subject of "Buildings for Small Holdings." Needless to say, Mr. Hunt, who is a member of the Departmental Committee of the Board of Agriculture on the subject, was able to speak with great authority; and his concluding hint that architects should pay particular attention to small holdings for the next few years, as large sums of money will inevitably be spent upon them, will doubtless be widely acted upon. Mr. Hunt pointed out that when the Small Holdings Act, 1909, was first introduced, there were no regulations as to what should be provided in the way of buildings, with the result that each county council was a law unto itself. The consequence is seen in the comparative costliness and unsuitability of many of the earlier buildings. The Departmental Committee was appointed mainly in order to insure an improvement in these respects. In the words of Mr. Hunt, the great problem in the proper equipment of a small holding is to provide, at the smallest cost, buildings which will be suitable and sufficient for the holdings concerned, but not in excess of their practical requirements. Insufficient or unsuitable equipment must lessen the productive capacity of the holding; while, on the other hand, excessive equipment must represent so much dead weight upon it, and involves the occupier in expenditure for which he can get no real return. Mr. Hunt's paper dealt separately with the construction of the house and of the necessary farm buildings, and was illustrated by several designs. We may perhaps draw attention, as of special interest, to the design for a pair of cottages erected at various places in West Suffolk at prices varying from £310 to £345, and to the designs for single cottages erected for £250 and £206 respectively. While making a special appeal to those more directly concerned with rural development, Mr. Hunt's paper will also be found of interest to all who are called upon to consider questions appertaining to inexpensive cottage design.—*The Surveyor and County Engineer.*

A Ministry of Art.

The *Times* reports the adoption of a definite scheme to be placed before the Government, including the formation of a Council whose advice would be at the disposal of all departments of the Government on which trained artistic advice is required. It is thought that there are many subjects continuously under consideration when such advice and guidance would be welcomed. It is also intended that the Council should, through the Minister, tender advice in matters that appear to require it.

Some such organization has been found in France and other European countries and in America to have served purposes of great public utility, and though taste in England has, undoubtedly, improved, it is thought that many blunders in the past might have been avoided had some such advisory body been in existence.

The Society of Architects, 1884-1913.

By C. McArthur Butler, F.C.I.S., Secretary of the Society.

THE formation of The Society of Architects arose out of a letter which appeared in the *Building News*, on February 8th, 1884, regarding the voiceless Associates of the Institute, who were then apparently very much on the same footing as the present Licentiates. A correspondence followed, and on February 22nd a letter appeared signed " One willing to help," suggesting the starting of a fresh Society. It subsequently transpired that the writer of the letter was Mr. E. J. Kibblewhite, who may therefore be regarded as the originator of the proposal and the founder of the Society.

The history of the Society is contained in eight volumes of Minute Books containing some 4,000 pages of handwriting, and twenty-four volumes of proceedings containing about 7,000 pages of printed matter, a total of say 11,000 pages of information; and the following notes must be regarded rather as a brief summary of the principal events than as a detailed account of the inception, development and present position of the Society.

It was on May 8th, 1884, that on the initiative of Mr. E. J. Kibblewhite, about fifty architects met in the Board Room of the Strand Board of Works, at 5, Tavistock Street, Covent Garden, and formed the nucleus of the Society. Amongst those present besides the Chairman, Mr. Kibblewhite, were the late Mr. Edgar Farman, the late Mr. J. B. Corby, the late Mr. William Young, the late Mr. J. M. Brydon, the late Mr. G. H. Guillaume, the late Mr. Arundel, and Mr. E. W. Harvey Piper, Mr. Tarte, Mr. Gotch, Mr. Maurice B. Adams, and Mr. G. A. T. Middleton. Both Mr. Gotch and Mr. Adams opposed the proposal, but in the end a provisional Committee was formed with Mr. Kibblewhite as Chariman, and Mr. Middleton as Honorary Secretary.

This Committee subsequently held its meetings in Mr. Middleton's rooms, in Great James Street, and in a very short time 186 architects had given in their names.

It was on June 23rd, 1884, that the first general meeting of the newly constituted Society was held in the Council Room at Exeter Hall, when these 186 Architects resolved to form themselves into a Society to be called The Society of Architects, under the Literary and Scientific Institutions Act of 1854. The late Col. Ellison, of Liverpool, was appointed President with the late Mr. H. R. Gough, as the Vice-President. Mr. Middleton was appointed Secretary, a position which he retained for nine years, afterwards continuing his active services as a member of the Council, as a Vice-President, and as Honorary Librarian.

Of these 186 Founder members, about 30 or less than one-sixth are at present on the roll of the Society, viz., Professional members: R. G. Bare, G. A. Birkenhead,

W. S. Braithwaite, H. Branch, T. W. Cotman, W. S. Ellison, G. W. Ferguson, A. R. Finch, S. Friend, W. L. Grant, C. E. Jackson (the present Hon. Treasurer), S. Jackson (Local Hon. Secretary, Weymouth), Elijah Jones, H. A. Kinder, H. E. Lavender, W. H. Linton, J. J. Lish, A. Marshall, Ellis Marsland (Hon. Auditor), G. A. T. Middleton, W. P. Ryan, T. R. Saunders, F. Simpson (Local Hon. Secretary, Wakefield), S. Welman, R. Whitbread. Honorary Members: E. J. Kibblewhite, Harry Hems, E. W. Harvey Piper. Retired Members: F. W. Catterall, R. Cruwys, J. Kassall, F. W. K. Tarte. Other survivors not now associated with the Society include Mr. W. H. Seth Smith, F.R.I.B.A., and Mr. C. Stanley Peach, F.R.I.B.A.; the former a Past President of the Society, and the latter a Past Hon. Corresponding Secretary, and Mr. J. Ball, the present Mayor of Nottingham.

In 1885, Mr. Gough succeeded Col. Ellison in the Chair, and the members' meetings were then held at Freemason's Tavern. In the meantime, the necessary rules had been framed and adopted for the working of the Society.

The first few years of the Society's existence was occupied largely in development and organization. One of the first acts of the Council was to call for designs for the membership certificate now in use, for which a prize of £10 10s. was offered. This was awarded to the late William Leck, who was eventually to become the first President of The Society of Architects' branch in South Africa. It is interesting to note that the third premium was awarded to a lady (Miss Farman, of Leicester), an omen of the day when a lady should become the owner of a membership certificate.

The Society from its earliest days recognized that it had responsibilities beyond its domestic affairs. It took an active part in promoting the first Architectural and Building Trades Exhibition, which was held in 1885, in the Floral Hall, Covent Garden. Subsequently the Society took part, chiefly by the appointment of a jury of its members, in the work of organizing other similar Exhibitions in Plymouth, Sheffield, and other centres.

The Society at St. James' Hall.

The financial resources of the Society were naturally somewhat limited at first, and the Secretary was called upon to give his services gratuitously, until the Council were able to offer him an honorarium, and finally in 1886, a modest salary. It was in the same year that the Society moved into larger offices at St. James' Hall, which remained the home of the Society for sixteen years.

By 1887, the year of Queen Victoria's Jubilee, the Society had got well under way, and a considerable number of new members resulted from a circular which was sent out, inviting Architects to join the Society in the interests of registration. History repeats itself, and we find the Society doing exactly the same thing twenty-six years later, without any knowledge at the time of the early precedent.

Even in these early days the Council were called upon to deal with questions of professional etiquette, and there is a somewhat quaint note to the effect that a member was requested to cease advertising publicly as an architect. Whether he did so or not history does not appear to relate.

Support for Registration.

The Society has always been favourable to Registration, and when the Architects' Federation Committee was formed in 1886, apart from any Society, The Society of Architects gave it not only moral but substantial financial support.

Up to 1889, the Society was dependent upon the professional Journals, and in particular to the *Building News* for the publication of its proceedings. They were then incorporated in the Society's transactions, the first report so published being that for the year ended June 30th, 1890, when the late Mr. Robert Walker, of Cork, was President. It is recorded that the Council regretted that the second reading of the Architects' Registration Bill had not been reached, and that although they were not connected with the Bill Committee, they were anxious that the Bill should speedily become law, and urged their members to assist to that end.

It was about this time that Honorary Local Secretaries were first appointed in various provincial centres, the question of establishing branches in at least two important colonial centres received consideration, and the Incorporation of the Society was taken in hand. It was feared that the Society would lose the services, through resignation, of Mr. Middleton as Secretary. As a matter of fact, a Mr. Hodgetts was appointed to the vacancy on November 25th, 1890, but he had in the meantime obtained another appointment, and fortunately the Council were able to come to an arrangement with Mr. Middleton, whereby his services were retained.

Incorporation of the Society.

The incorporation of the Society under the Companies Act, was accomplished largely through the instrumentality of the late Mr. Edgar Farman, at one time an architect, and one of the first members of the Society, of which he was the Hon. Secretary for the first eight years, and subsequently Hon. Corresponding Secretary for two years. He subsequently qualified and practised as a Solicitor.

The negotiations for the incorporation were of a somewhat prolonged and delicate nature, owing to the opposition which was made to it by other interested bodies, but the certificate of incorporation was granted in 1893. In the meantime the Memorandum and Articles of Association had been drawn up and among the changes was the alteration of the financial year so as to end on October 31st. Coincident with these developments was the publication of the proceedings as a monthly journal. The Society in that year took an active part in making suggestions for the consolidation and amending of the London Building Act, when it was in its draft stage. A large number of amendments were suggested by the Society, almost all of which were incorporated in the Act. At the first Annual General Meeting of the Incorporated Society, a proposal that after a certain date entrance to the Society should be by examination only, was referred to the Council for consideration.

In the following year, Mr. Edgar Farman resigned his position as Hon. Secretary and was presented with an illuminated address. He was succeeded by Mr. Ellis Marsland, another Founder member, who now serves the Society as the Hon. Auditor. The idea of holding provincial meetings on the Registration question was raised about this time.

CHANGES IN THE SECRETARIAT.

Soon after the Society was incorporated and fairly established, it suffered a severe loss by the resignation of its first Secretary, Mr. Middleton. The Society had decided to become an examining body and Mr. Middleton felt that he could not, as an architectural tutor, consistently continue in office as Secretary. Mr. W. H. Seth-Smith, a Past President, had previously withdrawn from the Society as a protest against it becoming an examining body. The institution of an entrance examination was therefore directly responsible for the loss to the Society which it thus sustained. Mr. Middleton was succeeded in office by Mr. A. Montefiore, now known as Mr. Montefiore Brice, Barrister-at-law, who held the position for a short time, making way for the late Mr. Montagu Baldwin, M.A., in 1896. The latter was a scholar of Pembroke College, Oxford, and for many years second master of the Grammar School, Honiton. Unfortunately Mr. Baldwin, never a strong man, died in August, 1898, and the Council were again under the necessity of finding a new Secretary. In November of that year they appointed, out of a number of candidates, the present holder of that office. The somewhat rapid changes in the Secretaryship since Mr. Middleton's retirement, coupled with Mr. Baldwin's illness, threw an enormous amount of work upon the then Hon. Secretary, Mr. Ellis Marsland, who held the record for long service in that capacity.

In 1895, the Register of Students was opened and the Council also formulated and published a scheme of examination for membership. The following year, registration meetings were held at Cardiff and Bristol, which were attended by the President and Mr. Ellis Marsland, the latter of whom was accorded a special vote of thanks at the Annual General Meeting, with the added recommendation that he came to the Society's premises every week and sat on the Committees. It seems clear, however, that the Committees he sat on did not meet once a week, but that the Hon. Secretary in those days, attended the offices at least once a week and probably a great deal oftener during the illness of the then Secretary and the interregnum occasioned by his death.

One of the new regulations of the Society provided that membership was not open to candidates under 35 years of age except by examination. Consequently the membership received something of a check, and later on the age limit was reduced to 28 and has recently been raised again, this time to 30.

Both in the Jubilee year 1887 and the Diamond Jubilee, 1897, the Society presented an address of loyalty to Her Majesty Queen Victoria, the latter address being presented by a deputation of six members who were received by H.R.H. Prince of Wales, afterwards King Edward VII.

THE FIRST ENTRANCE EXAMINATION.

The first examination to qualify for membership was held in October, 1898, and though a large number of applications were received for particulars, only three candidates sat at that examination, one of whom, Mr. W. A. Scott, of Drogheda, now Professor of Architecture at the Dublin University, won the Society's Silver Medal.

It is recorded that the second reading of the Architects' Registration Bill was set down for April 18th, 1898, in the House of Commons, but was not reached.

Under the Presidency of Mr. Walter Emden, whose recent death the Society so much deplores, increased interest was taken in the Registration question. Various provincial meetings were held, and papers read at gatherings at Sheffield, Blackpool, and other places. The late Mr. Emden took a great interest also in the question of Ancient Lights, and was largely instrumental in arranging for a deputation from the Society to present a petition to the Lord Chancellor. It was also under his auspices that a Testing Committee was formed, but financial considerations at the time prevented its development.

The Students' register was re-organized and placed upon a wider basis. During the year 1900, registration meetings were held in Exeter, Birmingham, Liverpool, and Manchester, at each of which the late Mr. Emden took the Chair, and Mr. Marsland opened the proceedings. The Bill was down for second reading on June 15th, of that year, but was not reached. The journal was issued in an enlarged form and printed on different paper under the title of *The Architects' Magazine*, the services of Mr. Charles Palmer, a journalist of wide experience, and now the Editor of the *Globe* newspaper, being retained in conjunction with the Secretary as Joint Editor, which association continued for seven years. The Society registered a telegraphic address, and was the first of the Architectural Societies in London to avail itself of the telephone. It also became a regular subscriber to the Architects' Benevolent Society, having previously been a somewhat irregular supporter of that deserving Charity.

About this time, the Society suffered a severe temporary loss by the enforced absence of Lt.-Col. Leslie, R.E., a Vice-President and Vice-Chairman of the Examination Committee, who was obliged to resign his offices on being appointed to a Command in Bermuda.

The Ordinary Meeting called for January 31st, 1901, was postponed to the next month, owing to the lamented death of Her Majesty Queen Victoria, in connection with which a suitable address was subsequently presented to His Majesty King Edward VII.

The Students' Competitions were inaugurated in 1901, and in the following year the number of Students had more than doubled, and the competitions were further extended. The Council at this time passed a resolution to the effect that the Society is of the opinion that it would be in the interests of the public if architects and engineers holding public appointments were debarred from private practice, and they also passed a resolution empowering the Council of the Society to take such action as may be necessary to promote legislation to amend the existing law appertaining to right of light.

Registration meetings were held in Edinburgh, Glasgow and Plymouth, and the Council appointed a Committee to confer with the Architects' Registration Bill Committee, a body of architects distinct from the Society, with a view to further co-operation.

The Society at Staple Inn.

It was during 1903, that the Society removed to Staple Inn Buildings, Holborn, owing to the demolition of St. James' Hall. In that year the Architects' Registration Bill Committee was amalgamated with the Council of the Society, and it was ascertained by means of a plebiscite of the profession, that at least two-thirds of them were in sympathy with the movement of Statutory Registration, and as less than 170 out of 5,000 or 6,000 architects voted against the proposal, and as a great deal of trouble was taken at the time to secure replies, it was evident that an overwhelming majority of the profession was in favour of Registration on the lines proposed. The Council of the R.I.B.A. at that time issued a counter statement, and appealed to the allied Societies to express their opinions on the matter. The resolutions which were subsequently passed by those bodies confirmed the individual voting of their members in favour of the proposal.

Some interest was caused, more particularly in city circles, by the suggestion of the Council, that the Church of All Hallows, Lombard Street, which it was proposed to demolish, should be taken down and re-erected elsewhere. The Council received an offer of a freehold site near London with sufficient funds for the purpose, and the promise of an annual income towards the upkeep of the re-erected building, and the scheme obtained the approval of the Bishop in principle. It was, however, afterwards ascertained that the position of the proposed site was such as to render it impossible for the authorities concerned to accept the offer.

The Council at this time had under consideration the drafting of a scale of charges and a form of contract for the exclusive use of the members.

The Gold Medal of the Society was won by an examination candidate for the first time, the winner being Mr. W. D. Jenkins, of Birmingham, a son of an old member at Swansea.

In 1904, it is recorded that an agreeable change in the attitude of the R.I.B.A. towards registration took place, and that the Society therefore adopted a policy of waiting. In the meantime, the Society's Bill was set down for second reading in the House of Commons in June, but was not reached. Mr. Marsland, at the invitation of the Manchester Society of Architects, read a paper on Registration there with most satisfactory results.

The question of Ancient Lights again came to the front, and an evening was devoted to consideration of a Bill framed by a Joint Committee of the R.I.B.A. and several other Institutions, which the Society decided to oppose as being not sufficiently drastic. In the meantime, the case of *Colls* ats *The Home and Colonial Stores* was settled by the House of Lords, which gave a decision in the late Mr. Colls' favour, calculated to prevent to a large extent any fictitious claims for damages to light being raised. The Council had the full report of the case printed for the information of the members, and presented a testimonial to Mr. Colls in recognition of his public-spirited action.

The Coming of Age.

The Twenty-first Anniversary of the foundation of the Society found it in a very satisfactory condition in every way. The session was marked by the admission of a woman for the first time to the register of Students. The lady in question, Miss Annie Hall, subsequently passed the qualifying examination, and was admitted to membership.

The Council had under consideration the tendency of Local Authorities to place the designing and carrying out of their public buildings in the hands of officials without due regard as to their architectural qualifications, and the Society issued a memorandum to every Local Authority in the Kingdom, suggesting that where a qualified architect is not already permanently retained as an official of the Local Authority, it is desirable that they should engage the assistance of a competent architect in designing and carrying out their buildings, or where such a permanent appointment is not possible that the architectural work shall be placed in the hands of a qualified local architect.

The R.I.B.A. and Registration.

It was in 1905, that the R.I.B.A. came to the conclusion arrived at so many years ago by the Society that the satisfactory training and education of architects could only be secured by Statutory powers, and they produced a draft Bill to deal with the matter. The Society were favoured during that session with a paper on Registration by two members of the Royal Institute Council, which, there is reason to believe, did a good deal to clear the air so far as to show what the desire of the Society really is in this respect.

The question of the ownership of Drawings came to the Council's attention, arising out of the case of *Gibbon* v. *Pease*, which the Society considered of such importance to the profession generally that they contributed a considerable sum towards the costs of the appeal which was, unfortunately, unsuccessful.

The Examination Gold Medal was won for the second time by a Welshman, Mr. Griffiths.

In the following year the Articles of Association were considerably amended, the "Associates" class being done away with, and the three survivors transferred to Hon. Membership. The Students were provided for as a class, the strength of the Council increased, and a class of "Retired" Members formed, and other changes made, calculated to provide for further developments.

The Society were not satisfied with the R.I.B.A. report on Registration, and they decided to proceed again with the Society's Bill. Advantage was taken of the General Election to secure many promises of support from prospective M.P.'s. At the International Congress of Architects held in London in that year, the Society were instrumental in obtaining the passing of the following resolution :—"That it is desirable in the interests of the public of all nations and of Architects, that all practitioners should have a statutory qualification."

It may be interesting to note that a member of the then Government, Mr. James Bryce, only recently raised to the peerage, was present at the Society's Annual Dinner that year, and shortly afterwards he secured the adoption of a clause in the Irish Labourers' Bill, providing that every person whom a District Council in Ireland, proposes to employ as an Architect under the Labourers' Act, must satisfy the Local Government Board that he is qualified to act in that capacity. This was a step in the right direction, though it has been found in practice that it did not go nearly far enough.

One of the features of this year was the growth and development of the Students' Section, due chiefly to the institution of a Travelling Studentship of the value of £25, with a Silver Medal ; and of an Architectural Scholarship of the value of £10, tenable at that time for three years and now held for one year. About this time the Society spent a considerable amount on the purchase of books for the Library, which was re-catalogued and made of more use to the members by the facilities afforded for the distribution of books on loan through the post.

THE SOUTH AFRICAN BRANCH.

One of the most fruitful acts of the Council at that time was the formation of a Branch of the Society at Johannesburg, which has since been very largely responsible for the securing of Registration in the Transvaal, and the promotion of the interests of architecture generally in South Africa.

A special appeal was received from the Architects' Benevolent Society, and the Society responded by offering a donation of fifty guineas, conditionally on having proportionate representation on the governing body, but on the President's assurance that the regulations did not permit of such an arrangement, the donation was made unconditionally. Subsequently, the Benevolent Society revised its regulations to meet your Council's suggestion, with the result that The Society of Architects has had a permanent representative on the governing body of the Benevolent Society ever since.

In 1907, the publication of the proceedings reverted to the old style and title of the *Journal*, but enlarged somewhat as to its present scope, the Editorship being again vested solely in the Secretary. At the same time the business, as well as the editorial department, was taken over by the Society, with very satisfactory results. Further developments took place in the Students' section and a scheme for organising correspondence classes was started, but as it was found eventually that it did not sufficiently fulfil its intended purpose, it was discontinued.

The Registration question was again prominent and the representative body of the Municipal Engineers went to considerable trouble in working up organisation among the Local Authorities, with a view of their opposing the Bill on the ground of its being detrimental to their interests. The Society, however, were able by means of a Conference of representatives to overcome the difficulty without departing from the principle.

The Society and Freemasonry.

Members who are Freemasons will recall that it was in this year that The Society of Architects Lodge of Freemasons was founded, this being the first Masonic Lodge identified by name with the architectural profession, or with any architectural body.

The following year, which was one of the most successful in point of view of the increase in membership, was marred by the death of the President, Mr. R. Frank Vallance, during his term of office. One of the Past Presidents, Mr. E. J. Hamilton, of Brighton, very kindly consented to fill the vacancy at very short notice.

It was in this year that the first membership examination took place in Johannesburg under the auspices of the local branch.

The Students' competitions, particularly the Travelling Studentship, attracted a large number of entries, and the designs were afterwards exhibited in London, Cardiff, Devonport, Birmingham and Gloucester, where they attracted a good deal of attention.

The Registration movement in the Transvaal was energetically taken up by the Society's Branch, with the result that a Bill was drafted and read a first time in the Assembly at Pretoria, at the end of June, 1909, and on July 7th the Bill was read a second time and passed without opposition. The share which The Society of Architects took in this matter, both by moral and substantial financial support, was generously acknowledged by the Transvaal Institute of Architects. The Society, with a view to bringing about similar unanimity of purpose at home, set the ball rolling by a letter which was published in the *Builder*, which culminated in a plebiscite of the profession, taken by that journal, the result of which was to ascertain that a majority of eight to one were in favour of Registration, a result which corresponded almost exactly with a similar plebiscite taken by the Society six years previously.

The Society at Bedford Square.

As the lease of the Staple Inn premises was coming to an end, the Society, after careful deliberation came to the conclusion that it was time they secured permanent premises, and after a good deal of negotiation they secured the lease of 28, Bedford Square, on exceptionally good terms at a moderate ground rent for a period of practically forty years. They expended a sum of nearly three thousand pounds in rebuilding, adapting and fitting the premises for the Society's use and are now in possession of a convenient and valuable building, which will lend itself to further extension when required.

An appeal was made to the members to enable the Society to carry out the work without encroaching upon the Society's reserve fund, but as a matter of fact, the whole cost of equipping the new premises was paid by the Society from its own resources, with the exception of about one hundred pounds contributed by members, the present position being that at the end of this last financial year there was a bank overdraft of about seven hundred and eighty pounds, considerably less than the market value of the cash securities deposited, the premises themselves being unencumbered.

In 1910, the Society received with great regret the intimation of Mr. Ellis Marsland that he could no longer continue the duties of Hon. Secretary, which he had discharged for so many years. He was presented with the Gold Medal of the Society by the Council, and the general body of members made a further presentation to him. Mr. Ellis Marsland up to that time had served the Society in one official capacity or another practically ever since its foundation, and he is still in office as the Hon. Auditor.

It was at this time that the Council was invited by its members to give a lead on the proposed R.I.B.A. Licentiate scheme, and the Council expressed their opinion that it was undesirable that any members of the Society should join the Royal Institute in any other capacity than that of corporate member. The large majority of members at that time showed their agreement with the opinion expressed. The number of Members of the Society who are also Licentiates of the Institute is considerably more at the present time, but this is due to the fact that many Licentiates subsequently made application for membership in the Society, and a certain number of them were admitted. Licentiateship in the R.I.B.A. is not in itself a qualification for membership in the Society.

THE R.I.B.A. AND THE SOCIETY.

The inauguration of the Society's present premises took place in November, 1910, when a reception was held by the President, Mr. Bond, which was attended by some of the leading members of the Council of the Royal Institute. It is a matter of common knowledge that it was through an informal conversation between some of the representatives of the two bodies on this occasion, that a way was found for the Council of the Royal Institute to extend an invitation to representatives of the Society to meet them in conference on the Registration question in the following January. These meetings were continued for some months with the result that a scheme of fusion agreed to by the two Councils was approved by the general body of members of both Institutions, and all that remained to complete the matter was the signing of the agreement and the confirmation of the resolution passed by the Society. On the eve of this meeting, the Society was advised that the Institute had discovered that it had not power under its charter to enter into the agreement, and as the Society would not commit itself definitely without this safeguard, the meeting was adjourned, pending the completion and execution of the agreement. In the meantime, the R.I.B.A. expressed their intention of making an application to the Privy Council for a supplementary charter to give them the necessary powers to enter into the agreement referred to.

In the following year the Council of the R.I.B.A. after further consultation with representatives of the Society, drafted a new supplementary charter to enable the proposals previously agreed upon to be carried into effect, but when this proposal came before the general body of the Royal Institute they threw it out and referred the whole matter back to the Council of that body.

Another year has now elapsed and the present position is that the Royal Institute find themselves in the difficulty of being unable to promote a Registration Bill, because of certain disabilities in connection with the Licentiate Class, and unable to overcome their disabilities, owing to the Associates refusing to recognize the Licentiates as corporate members. They propose, it is understood, to apply for a new charter establishing a register of architects. In the meantime, the Society's Registration Bill has been revised and settled in conjunction with Sir A. Cripps, K.C., M.P. (who has recently been made a Viscount), and is to be introduced into Parliament at the first favourable opportunity.

The Society took part in drafting the Copyright Bill, a member of the Council being co-opted by the Council of the R.I.B.A., a member of their Committee dealing with the Bill.

The Articles of Association have been further amended, and the Society practically reconstituted, and the powers of the Council greatly widened in many respects.

One of the most important matters taken in hand during the last year or so has been the formation of the Board of Professional Defence and the establishing of a

Defence Fund. A new class of Graduates has been formed, a Code of Ethics published, and the Society's examination schemes very much developed.

The Society took an active part in the formation of the Architects and Surveyors' Approved Society under the National Insurance Act, 1911, in conjunction with other interested bodies.

Perhaps the most far-reaching work of the Society has been that of bringing into existence the Beaux Arts Committee for the promotion of architectural training in Britain on Beaux Arts lines.

All these matters are set out in the recent Annual Report, and I do not propose to refer to them in detail, but to bring the present record to a close with some statistics

SOME STATISTICS.

The membership has risen from 186 in 1884 to 1185 in 1913 (now about 1200). This means that during the last twenty years the membership has nearly trebled. The annual income during the same period has increased fourfold and the total surplus more than twelvefold. The annual income, which was limited to three figures up to 1899, then reached four figures and jumped the next year from £1,000 to £1,450. It went steadily up, until in 1907 it reached close on £2,000 and during the last six years has risen to £3,000 per annum. There have been deficits in the revenue for the year on some half-a-dozen occasions, but the Society for twenty-two years at least, has always had a total surplus of assets over liabilities, ranging from £39 in 1891, to £3,136 in 1913. The current balance sheet shews that if the Society was wound up to-day it would have something like £3,000 to distribute under its Articles of Association, after discharging all its liabilities.

Correspondence.

To the Editor of "The Journal of The Society of Architects."

Proposed Architects' Act in South Africa.

SIR,—Mr. Harris criticizes my previous letter to you and endeavours to show that I occupy a position which I have never taken up, *i.e.*, that the present Transvaal Act should be extended to the whole Union. The present Act is, in my opinion, so faulty in its drafting that I would not associate myself with such a proposal.

My purpose was to point out that Registration was the *first* and *foundation* object, and that confusing it with other issues was very bad tactics.

Messrs. Harris & Co. want Parliament to legalize Trades Unionism and force its provisions on every one following the architects' calling, and there is no doubt Parliament will do nothing of the kind.

These gentlemen seem to think that Parliament will be ready to legalize an injustice, because a majority of interested persons ask them. My arguments have never been answered or even an attempt made to reply to them, nor a case for Parliamentary interference made out.

Before our Parliament will legislate, it will have to be convinced (1) that the legislation is in the public interest ; and (2) that no interference with existing personal liberty could be sanctioned, because certain persons think it will sink their own professional aims.

Johannesburg, *February 4th*, 1914. EDWARD H. WAUGH, A.R.I.B.A., M.S.A.

The Society of Architects. South African Branch.

Government Architecture and Competitions.

An exceptional interest attaches to the proceedings at a special general meeting of The Society of Architects (South African Branch), which was held at Johannesburg on January 5th, as will be gathered from the following report taken from *The South African Architect.*

In previous issues our readers have been informed of the appointment, by the several architectural organizations of South Africa, of a Joint Committee to consider and take action upon certain constantly recurring questions affecting the interests of the profession, which questions had again been brought into prominence by the unsatisfactory result of a competition instituted by the Government for the design of the Governor-General's proposed new residence at Capetown. The Society's meeting was for the purpose of receiving the report of its representatives on the Joint Committee. Pending the expected issue by the Joint Committee of an official statement setting forth the results of its labours, the Society's delegates were somewhat circumspect in particulars, and abstained from drawing any conclusions as to the effect of the various steps in which they had participated. Their narration of happenings, however, included the information that an interview was granted to the Joint Committee by the Minister of Public Works at the Union Buildings in Pretoria on December 12th, 1913.

A Historic Document.

On that occasion the delegates made their representations to the Minister in a document which will probably become historic in the annals of the South African architectural profession. The full text of the document was given by the Society's delegates in the course of their report, and a knowledge of its contents will no doubt be as welcome to the profession throughout the country as it was to those present at the meeting. Mr. Nicolay, the President, occupied the Chair.

The report stated, *inter alia,* that several meetings had been held by the Transvaal delegates, and a basis of joint action had been drawn up and agreed upon in harmony with the Natal Institute's delegates. Ultimately, the Cape Institute appointed its delegates and came into line. After some correspondence Sir Thomas Watt, the Minister of Public Works, agreed to receive the delegates, and a document was drawn up embodying the representations to be made to him. This was presented to him at an interview held in the Union Buildings, Pretoria, on December 12th, 1913, and read as follows ;—

The Text.

December 12*th*, 1913.

To the Hon. the Minister of Public Works, Administration of the Union of South Africa, Union Buildings, Pretoria.

1. (*a*) In the matter of the several unsatisfactory and abortive competitions for the design of various Government buildings ;
   (*b*) The absence of any competition whatsoever for other (these including the most important) Government buildings ; and
   (*c*) The proper sphere of Government in encouraging the development of the national architecture.

2. This deputation consists of duly-appointed representatives of the various South African architectural bodies as follows :—

   (*a*) The Association of Transvaal Architects, established under the Architects' Private Act (Transvaal) 1909, of which every architect in the Transvaal—approximately 180 in number—is a member.
   (*b*) The Transvaal Institute of Architects, a voluntary body composed of the older practitioners of the Transvaal Province, and affiliated with the Royal Institute of British Architects.
   (*c*) The Cape Institute of Architects, a body consisting of the principal practitioners of the Cape Province, and affiliated with the Royal Institute of British Architects.
   (*d*) The Natal Institute of Architects, a body consisting of the principal practitioners of Natal, and allied with the Royal Institute of British Architects.
   (*e*) The South African Branch of The Society of Architects.

This deputation thus represents some 450 architects resident in the Union of South Africa.

3. Each of the foregoing organizations have separately communicated with the Hon. Minister to varying purport, nevertheless covered by the following recapitulation :—

   (*a*) Disagreement with the assessors' report on the competitive designs for the Governor-General's proposed residence at Capetown ;
   (*b*) Considering that the result of said competition adds one more to several unsatisfactory incidents in the obtaining of designs for Government buildings ;
   (*c*) Respectfully requesting the Hon. Minister to grant an interview on the whole question to a deputation representative of the various architectural bodies of South Africa.

4. At the outset of these representations, to avoid any possibility of misunderstanding, and notwithstanding the abortive competitions to which they will refer, the delegates desire to state that they are unanimous in believing that the method of open competition for the design of all Government buildings is by far the best course for the development of a national architecture.

5. Not alone have many Government architectural competitions up to the present been abortive and unsatisfactory, both to the Government and the profession, but there is a likelihood of further failure to any future Government competitions unless certain hitherto obtaining conditions are changed.

6. A number of important Government buildings are being, and have been, carried out by a large salaried designing staff in the Government Office of Works, and alternatively by a practising architect appointed without competition. Both these courses are felt to be prejudicial to the fostering of a national architecture in South Africa.

7. This deputation, having been accorded the favour of an interview, feel that their comment and statement may be fruitless unless accompanied by those practical suggestions which they are most competent to offer for the guidance of the Administration, and which they beg to offer and recommend as follows :—

- (*a*) That open competition be instituted for all Government works of architectural importance.
- (*b*) In the event of the foregoing recommendation proving acceptable to the Administration, an Honorary Advisory Board containing an equal and annually elected representation of each of the architectural bodies of the Union, will be constituted ; which Board the Government can consult in all matters relating to proposed public buildings.
- (*c*) That, the jury system of assessing being considered most suitable, three assessors shall be appointed to draw up the conditions and adjudge in all such competitions ; one of said assessors to be nominated by the Government and the remaining two to be nominated by the aforesaid Advisory Board representing the architectural profession of South Africa.
- (*d*) In case of any great or monumental public building, the competition for which appears likely to attract almost the whole of the South African profession, it shall be competent for the Government and the said Board to nominate an assessor resident oversea, any other assessors in such cases to be subject to his decision and to act advisorily to him only.
- (*e*) In view of the widespread conviction as to the injustice of the assessors' findings in the recent competition for the Governor-General's proposed residence at Capetown, this deputation recommends that the plans submitted be re-assessed by assessors appointed as suggested in Clause (*c*) preceding.

8. This deputation thanks the Hon. Minister for granting this interview. The subject matter of these representations is one affecting the high interests of an important profession, as well as the very greatest factors affecting the surroundings and culture of the nation. By its architecture is a nation daily and most insistently —if unconsciously—influenced. All art production is dependent upon opportunity. This deputation asks the Government to encourage the development of South African architecture by genuinely opening the door of opportunity for the highest which its architect citizens can produce.

THE NEXT STEP.

Subsequent to the interview, the report proceeded, the delegates returned to Johannesburg, and immediately met to deliberate upon their next step. The following resolutions were then unanimously adopted ;—

1. That this Board of Delegates continue its existence until the Advisory Board (referred to in Clause 7 (*b*) of this morning's representations to the Minister has been constituted.
2. That the Delegates be requested to report to their various bodies regarding the work of this morning's deputation, and to request the said bodies each to appoint two representatives to constitute an Advisory Board of ten, as approved by the Minister this morning.
3. That the Secretary draft a resumé of this morning's proceedings to be approved at a further meeting of the delegates, and thereafter to be submitted for the Minister's approval, with a view to its publication.
   Copies of said resumé to be sent to each of the five architectural bodies.
4. That the Secretary further draw up a full detailed report of this morning's proceedings, also to be approved at a further meeting of the delegates, and then forwarded to each of the five bodies represented on the deputation.

The Cape and Natal delegates were leaving for their homes the same night, and at that meeting, therefore, a further resolution was adopted by the Transvaal delegates cordially thanking and congratulating the visiting gentlemen for the excellent services they had rendered during the various conferences.

The report concluded with a recommendation to the Society to defer appointing its representatives to the " Advisory Board " until its receipt of the Joint Committee's official report, resumé, and recommendations. Pending the arrival of these, the Society's delegates limited themselves to stating their " personal impression that the interview with the Minister was of a highly satisfactory nature, and evidenced the sympathy of the Government with our desire for a reform of the conditions hitherto obtaining in regard to Government architecture.

The meeting adopted the report after very brief discussion, and the proceedings terminated with thanks to the Chair.—*The South African Architect.*

[We consider the foregoing of sufficient importance and interest to our members in particular, to warrant printing it in full, and so preserving a record for future reference. The various architectural bodies in South Africa work together harmoniously in protecting the interests of the art, and their representations consequently carry great weight with the powers that be. In all these matters the Society's Branch is conspicuous in the active and untiring way in which it does its share of the spade work.—Ed.]

Members' Meetings for March.

March 4th. Chamber Concert at headquarters, 8 p.m. Mr. Noel D. Sheffield's Orchestra. Morning dress.

March 11th. Regular Lodge Meeting (3244), Holborn Restaurant, 5.30 p.m. Students' "Social" at headquarters, 6 p.m.

March 12th. Ordinary Meeting, 8 p.m. Paper on "Bricks and Brickmaking," by Mr. Arthur E. Brown, B.Sc., London. Smoking. Light Refreshments.

March 31st. Graduateship and Membership Examinations commence.

Unsatisfactory Architectural Competitions.

Members are requested not to compete for any of the following Competitions without first ascertaining from the Secretary whether the conditions have been amended in accordance with the Society's views:—

Barnsley, Town Hall; Weymouth, Housing; and Mill Hill, School.

The Membership.

Resigned.—D. M. WILSON, Horsforth, *Student.*

Deceased.—VICTOR MITCHELL, Bournemouth, *Member.*

Elected.– N. M. M. BHOWNAGGREE, London; M. K. GLASS, Newcastle-upon-Tyne; P. A. HINCHLIFFE, Barnsley; J. W. HUNTER, London; A. SCHOFIELD, Birkdale. *Members.*

Twenty-ninth Annual Dinner.

The Annual Dinner will be held at the Hotel Cecil, on Tuesday, April 21st, 1914. Tickets, 7s. 6d. Further particulars will be announced in due course.

THE

Journal

OF

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FOUNDED 1884. INCORPORATED 1893.

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The Society is not, as a body, responsible for the opinions expressed by individual authors and speakers.

Concert of Chamber Music.

The Society does not confine itself to purely professional matters, but is alive to the importance of Social gatherings. Its Salon is admirably adapted for music, and on March 4th, a talented body of amateurs delighted those who were fortunate enough to attend, with a programme of real musical interest. It has been the aim of Mr. Noel D. Sheffield (Member of Council), who organized this and previous similar Concerts, to present something different from the banal rubbish usually heard at ballad and smoking concerts.

In place of the string quartette that has played on the previous occasions, two sonatas for violin and piano were given. The Concert opened with an interesting work by the little known Scandanavian composer, Emil Sjögren, and concluded with Edv. Grieg's well-known Sonata in G Minor. These works were played by Mr. W. J. Collins and Mr. P. J. Dover, with a perfect ensemble, that showed rehearsals had not been neglected. Mr. Dover, who by the way, was at the piano nearly the whole evening, gave two groups of solos, including the well-known Polonaise in A Flat, by Chopin, and the two magnificent Rhapsodies, by Brahms. Mr. Dover's playing is far in advance of the usual skilled amateur performance, in fact, his technique might aptly be called magnificent. Miss Florence K. Balfour delighted the audience with two groups of Lieder, by Brahms, Dvörak, and MacDowell. Her singing showed that she is a true artist and musician, which is a compliment that can be paid to few amateur singers. Miss Winnie Cooling also sang, in a quite delightful way, songs by Elgar, and Montague Phillips. The fact that every performer received an encore, proves that people will appreciate good music if it is given to them.

Proceedings.

The Fourth Ordinary Meeting of The Society of Architects, for the Session 1913-14, was held at 28, Bedford Square, London, W.C., on Thursday, March 12th, 1914, at 8 p.m.

Mr. Percy B. Tubbs, F.R.I.B.A., President, having taken the Chair, it was resolved that the Minutes of the last Ordinary Meeting, as printed in the *Journal*, be confirmed and signed.

Four nominations for Membership were announced, and a ballot was taken for the election of the following Candidates to Membership, and was declared to be unanimously in their favour.

Bryan. George Albert,	2, Rostrevor Mansions, Fulham, S.W.
Evans. Thomas John,	County Architects' Department, Trowbridge.
Goulborn. Horace,	Queen's College, Birmingham.
Hearne. Frank,	23, Prudential Buildings, Union Street, Oldham.
Hill. George Albert,	17, Victoria Place, Haverfordwest.
Jamieson. Ernest Arthur Oliphant Auldjo,	13, Young Street, Edinburgh.
Lakeman. Albert,	15, Dingwall Gardens, Golders Green, N.W.
Osbourn. Edward,	P.W.D. Pietermaritzburg.
Pratt. William Dymock,	Long Row, Nottingham.
Walker. Smart,	Chestnut House, Cockfield, Co. Durham.

The following elections by the Council were announced :—

Register of Students.

Baguley. Herbert,	Hale Road, Hale Bank, Widnes.
Prime. Frederick William,	2, Lowfield Street, Dartford.
Tubbs. Grahame Burnell,	2, Moore Street, Cadogan Square, W.

Mr. Arthur E. Brown, then read a paper on "Bricks and Brickmaking," and a discussion ensued in which the following took part : Messrs. Clement Broad (Ex-President of the Clay Workers' Institute), H. Freyberg, F.S.I., Ellis Marsland, R. Geo. Bare, J. G. Collier, H. T. Cover, C. H. Norris, and the Chairman. A hearty vote of thanks was accorded to the lecturer, and the proceedings terminated.

Graduates and Students' Competitions.

Competitors are reminded that the drawings for the quarterly competition must be deposited at the Society's offices not later than April 30th, and those for the Travelling Studentship by May 1st, in each case before 6 p.m. In the latter competition it should be noted that twelve elevations and six sections of the farm buildings are required.

Bricks and Brickmaking.

By Arthur E. Brown, B.Sc., London.

IF I were not speaking before an assembly of experts in materials used for building, I should commence by an apology for venturing to attempt to render interesting a subject of such apparently unromantic a kind.

As I have, however, no need under the special circumstances to be diffident, I shall endeavour to persuade you to follow me into the devious and really intricate paths of knowledge in my subjects in order that you may, when I have finished my task, be inclined to concede that though you knew something about bricks, you were not aware of the practical difficulties which beset the path of the maker or the scientific principles which interest the expert.

My subjects are two, and my standpoint in regard to them is also duplex, for on " Bricks," I speak with bias as a manufacturer, whereas, on " Brickmaking," I speak as an expert and scientist, therefore, without personal prejudices.

Though, for euphony of title, my lecture is headed " Bricks and Brickmaking," the cart is really put before the horse, and I must ask you to favour me by hearing something about how bricks are made before I tell you my tale of " Bricks " that have been well and truly laid through the centuries.

The materials of which bricks are made are in every sense common and perhaps for this reason alone the trade of Brickmaking is generally looked upon as a low grade and common one.

The uninitiated man says and thinks bricks are easy to make. You dig a lump of common clay, put it into a heavy and ungainly looking machine made mostly of common cast-iron, the wheels go round and out come bricks, which only require baking and they are ready for use in their millions. A simple proposition indeed! Yet, I would remind you that immense sums of money have been lost, and very few fortunes made by this apparently simple business.

Clay, the staple material (not a mineral by the way in the legal sense), is found in many varieties in all parts of the globe, and the most important consideration of all in manufacture is the large bulk of material used and manipulated for a small ultimate return. The many varieties have as many various characteristics, and the problem of the business consist chiefly in discovering the best methods of utilizing these characteristics to the best advantage and overcoming those that are technically objectionable.

In the limits of time at my disposal, I propose to omit any description of how bricks are made with materials other than those of the clay description, and I will, therefore, first give some account of clay and its properties.

GEOLOGY.

It would require a lecture to itself to give the geological history of clay, and to-night I need only touch the fringe of the subject.

Clays are found in two categories geologically, surface clays and geological deposits. The first named are those of more recent formation found in all parts of the world in comparatively shallow beds which have been deposited by ice, rivers or lakes in what is called the Pleistocene period. Such prehistoric remains as are found in any of them belong chiefly to the animal kingdom. These are not frequent, and consist usually of bones of large mammals.

In my native county, Essex, I have found the teeth and bones of the elephant in the white chalky clay under red clay at Chelmsford.

The geological clays are of varying age, the Bagshot, London Clay, Reading and Gault beds being the most recent. The red Marls of Leicestershire, Warwickshire and Wales, were deposited in earlier times and belong to the upper Triassic beds. Earlier still are the shales and fireclays of the coal measures or carboniferous period. This sub-division is of the sketchiest kind, because my intention is rather to show what clay is and how it is used in brickmaking than to describe its origin. It may be sufficient to note further that clay in general is the product of the decomposition or disintegration of granitic or other igneous rocks and that all clays possess certain chemical and physical properties in common.

CHEMISTRY.

It is frequently supposed that chemistry must play an important rôle in brickmaking. This is true, obviously to a certain extent, and in some branches of claymaking its importance is great.

In the more ordinary use of clay for brickmaking, chemistry is, however, of comparatively meagre value. The reason of this is not difficult to appreciate when we consider what I may call the proportion of things. I will put it in this way :—

A potter uses a couple of pounds weight of carefully prepared clay and expends upon it much labour, care, design and decoration. The original value of the raw material is, let us say, under one penny. The final value of the art vase may commonly be 20 shillings. It may be two thousand shillings, though such an increment is rare. Taking it at 20*s*., the value of the clay is enhanced by art from less than ½*d*. to 10*s*. per lb., or say 300 times. Now, consider on the other hand how the brickmaker takes three tons of clay and makes it into one thousand bricks. The value of the clay is say 1*s*. 6*d*., and of the finished bricks, say 30*s*. Not only is the value increased by a small multiple of the original value of the raw material—say twenty times—but the coal alone required to make, dry and burn the bricks, costs in the London district with the most modern kilns at least 6*s*. The lay mind then can easily realize that with such a small increment there is little or no margin for the work of the chemist on his raw material, and really none whatever to admit of making mixtures with materials brought from a distance in order to vary the composition of the native clay.

It is apparent, therefore, that though the potter may analyse his clay and bring from a distance ball clay and felspar to mix with his China clay in various proportions, the maker of bricks of even the best qualities can expend but little on investigating the chemical nature of his raw material, and nothing on the purchase of outside products. He has to content himself with investigating the physical properties of his clay and using such expedients, as may be found advisable to modify them in a suitable manner, as are within the means of his own estate.

Chemistry tells us that clay is a compound of silica and alumina in fixed chemical proportions. It is what is called a hydrated silicate of alumina. Chemically, clay is this and this only, but in nature clays present almost infinite variety by reason of the presence of other substances. They contain free silica or sand in widely varying proportion. They contain also free oxide of iron, to which the red colour of the Suffolk brick and the blue colour of the Staffordshire blue brick are due.

They contain alkalies,—potash and soda, refractory earths,—magnesia and lime ; many contain small quantities of oxide of titanium, a so-called rare earth. These are all in comparatively small proportions, and whatever plastic clay we analyse it is found to contain somewhere in the neighbourhood of 85 per cent. of silica and alumina. Silica is sand. Alumina is the oxide of that peculiar light untarnishable metal aluminium, which has given chemists so much trouble to produce commercially, and metal workers so much trouble to handle and fashion for use. The few other materials found in clay have far less influence on the final product than does the varying physical condition of silica and alumina.

The presence of iron oxide has effect on the colour, and the presence of lime also. The presence of lime and alkalis have marked effect on the fusibility of the clay under great heat.

In these matters, chemical analysis is of assistance to us, but even so, practical examination will tell us all we need to know in these respects without analysis. The presence of water which can be measured by analysis interests us only when we turn to a physical examination of the properties of clay.

PHYSICS.

Clay is unique, though to many it is only dirt, because it is the only substance found in nature possessing the property of plasticity, by virtue of which clay may be changed in form without breaking up or destroying its continuity, or may be joined without the use of any cementing material.

In nature, most clays are only in a semi-plastic state, and become quite plastic when water is added to them. The purer the clay the more plastic it is in the natural clay beds, provided the silicate of alumina is in a state of division sufficiently fine.

It would seem that this important property is due to the fact that silicate of alumina can absorb water in large volume, at the same time becoming gelatinous and swelling up. It is this property that makes clay impermeable to water.

From this explanation we can easily understand that when clay is dried and the gelatinous particles lose their water they become less in volume and shrink.

We all know that clay shrinks in drying because of the way clayey soil cracks in summer time. It is also pretty widely known that the more " sticky " the clay is the more it cracks when dried. This, it is apparent, is because it is purer and contains more of the gelatinous silicate of alumina in a given volume than a sandier clay or loam which shrinks less in drying.

It will be clear then, that a sticky or strong pipe or tile clay shrinks more in percentage than a sandy clay, but there is more in the matter than this.

Given a sandy, less sticky or " milder " clay like that of the Suffolk brickfields, the amount it shrinks in drying depends also on the shape and size of the sand particles.

These are surrounded by the gelatinous material when wet, and at a certain stage in drying, they come so close together in the mass as to touch each other. Now, if the sand grains are rough and angular, their further movement is arrested, whereas if fine and round they can slide on one another into still closer positions, and so shrinkage continues further.

When a clay with fine round sand grains dries, shrinkage goes on till arrested by the grains getting as close together as is possible, but still the gelatinous pure clay surrounding them goes on shrinking, with the result that spaces or pores begin to be formed in the mass, into which air enters.

We thus arrive at another condition in which the pores formed in the clay gradually lose water throughout the whole mass. The size of these pores depending on the size and shape of the grains, we get two different states in different kinds of clay. The one is called porosity and the other permeability. They are only different degrees of the same thing, but they are interesting to the brickmaker because of the difference in quality of the brick produced and the different results obtained by different processes of manufacture.

All clays found in nature become porous when dried, but those with the larger angular grains are permeable even before drying. This peculiarity is of great importance in a building, for the striking reason that a permeable brick will better resist the weather and will also " breathe " or allow air to pass through the walls. This is easily understood and is illustrated by a simple proposition.

Take a glass tube with a bore of say $\frac{1}{8}$ of an inch, or a straw, and one can easily blow through it. But take the broken stem of a thermometer which has a very fine bore and it is not possible. The passage of water is of corresponding ease or difficulty.

Now I can quite well believe that my arguments may convince you that the permeable brick will let more air pass than the merely porous one, but you will say that the same applies to water. This is true, but two points even in this connection still indicate that the permeable brick is best for buildings.

The first is that, provided the wall is not too exposed to constant driving rains, in which case it should be built hollow, the water dries out very rapidly when the rain stops. In our variable climate, the permeable brick will usually dry out completely between the rain periods and before any water has penetrated the wall, and will again let air through. The porous brick will not, because it takes proportionately longer to dry than it does to wet.

The second point is the effect of frost. It is well known that water expands just before freezing. That is why it cracks our water pipes. The same thing happens inside a brick, but when the water in a permeable brick freezes, the holes are large enough to let the ice squeeze out when formed and no harm is done.

In a porous brick (that is one with extremely fine pores) the ice cannot squeeze out for the same reason as you cannot blow through a minute tube, and so it bursts the face off the brick instead.

I must speak here in passing, of two kinds of brick in which the properties of porosity and permeability are of quite a different nature. These are the bricks made by the semi-dry process of manufacture, of which more later.

In one type, exemplified by the Fletton brick, the shale is pressed into shape in a nearly dry state and plasticity is not present at any stage of the process. When burned in the kilns no change of physical condition of the clay takes place. Shale is in the form of flakes, and the interior of the brick, therefore, is in an irregular condition with no direct uniform pores or tubes in it. Yet it contains a proportion of spaces with air in them. The outside surface is more compressed than the inside, and is smoothed or polished by the action of the steel moulds in which they are pressed. When, therefore, after a long exposure to wet, the interior becomes more or less soaked or sodden with water, frost will produce the same disastrous results as with the " porous " non-permeable brick, but in a still greater degree. And once the skin is broken further disintegration is still more rapid.

The second type is exemplified by the Accrington red brick. This, too, is generally made by the semi-dry process, but on burning in the kiln the clay begins to melt and becomes vitrified. It is then practically impervious to water and suffers no harm in frosty weather. It is a good sound brick, but it does not breathe at all, and therefore possesses only one of the two important virtues of the brick that is perfect from the hygienic point of view.

I must not forget to mention that the permeable brick has a further virtue as it does not conduct heat and cold as much as the hard impermeable brick, and for all these reasons I venture to express the opinion that a sandy hand-made brick, besides being more artistic is more lasting and more hygienic than any other type made.

Continuing my remarks on the physical properties of clay, I would call your attention to the fact that in the practice of brick drying and burning many technical difficulties arise and many interesting scientific principles are involved.

In the use of the plastic method of making, a curious feature is seen in the difference of behaviour of surface clays and geological clays.

The aim of manufacturers is to dry the newly made brick with the least possible injury to shape by twisting or cracking. It is found that a surface clay presents little difficulty in the early stages of drying, but it is very apt to crack suddenly when about two-thirds dry. On the other hand, many geological clays are very liable to crack in the early stages, and yet give no trouble when about one-third dried.

A similar difference exists in burning the different classes of clays. The surface clays do not shrink in burning unless over burned, but many geological clays shrink little in drying, and a great deal in burning. This is specially the case with the Marls of Leicestershire, Warwickshire, and Wales.

Some of these when burned behave curiously, in that you may get them up to full temperature in the kiln, and for twelve hours or so they do not contract. Then they begin to do so, and for forty-eight hours continue to shrink in a regular manner. Practice teaches the burners to measure this contraction, and when it reaches a certain amount they stop firing, because they know the goods will prove correctly fired.

With the surface clays this does not occur, but the colour of the goods is influenced by the length of time the full heat is kept up. Red Suffolks require " soaking " with fire in order to get the iron in the clay oxidized to a good red colour.

The burning of bricks presents many other interesting features, chiefly in relation to the production of the final colour required, but I must begin at the beginning of this branch of the subject.

Clay contains a great deal of water, and speaking chemically, this water is present in three distinct conditions or states. A wirecut or handmade wet brick contains " water of manufacture," which is evaporated completely in the drying process. The brick is then no longer plastic, but is hard and solid. If now it is heated up to the boiling point of water, 212° F., it loses more water called hygroscopic water. The water of manufacture may be from 33 to 50 per cent. of the total weight of the wet brick. The hygroscopic water is about 5 per cent. The driving off of the hygroscopic water in the kiln is called steaming. If the brick which has been steamed is taken out of the kiln it will absorb water from the air until all the 5 per cent. is back again in the brick, but it will not absorb any water of manufacture.

Up to this stage the clay can be made plastic again by wetting it. On continuing to heat up the kiln till it reaches about 900° F., more water again is driven off. This is the water chemically combined with the silicate of alumina. It amounts to about 10 per cent. of the weight of the dry brick, and when once it is driven off the plasticity of the clay is finally lost and cannot be restored. The clay has become brick, although at that temperature it is not sufficiently changed in chemical nature to remain permanent and solid. The heat must be raised to about 1,800° F., to produce a well burned red brick, and still further for other types such as firebrick, which requires about 2,250° F. temperature. Having considered the action of heat in burning clay we are still confronted with a number of other features of the process of burning.

BURNING PROCESSES.

There are roughly speaking five distinct processes, each with special variations according to the qualities of the goods, and with a number of different types of kilns for use. The first and oldest process is clamp burning. Everyone is familiar with the large clamps of stock bricks to be seen in Essex and Kent.

The process is characterised in these yards by the mixing of the fuel with the clay before moulding the bricks. The fuel is usually sifted house dust, that is the contents of house dustbins freed from their old tins, cabbage leaves and other refuse till only the cinders are left. This fuel contains about 35 per cent of coke proper.

The huge stacks of bricks containing this fuel intimately mixed with the clay have two or three layers of large cinders at the bottom, which are fired and serve to ignite the mass.

The bricks are stacked closely and air gets access to them so gradually that the heat is generated slowly and more or less regularly throughout. A clamp may take from six weeks to three months to burn through and requires a great deal of expert attention to get good results.

The air supply is so restricted that no more reaches the bricks than suffices to burn the fuel. None, therefore, is left over for the oxidation of the iron in the clay so that a yellow colour instead of red results.

On the continent, in Belgium for instance, clamps are also made, usually containing as many as a million bricks, but the fuel, there in the form of coal dust, is not mixed with the clay, but is placed in layers between the rows of bricks.

The burning of common bricks (other than stocks and including Flettons), red bricks, tiles and firebricks is carried on in kilns of a great variety of types, either fired with coal or gas. This I call the second process. A brick structure is built to contain the goods and fire grates are constructed below or by the sime of them on which coal is burned. A similar type of kiln is used for burning Staffordshire blue bricks and sanitary pipes, but two others of the five processes are used in them.

The stages of the process of kiln burning are as follows :—Steaming, raising the heat, soaking and cooling. The first two are the same in all the types of kiln and all processes of burning. The soaking, however, is effected in two different ways. With red and most common bricks the soaking is done with a free burning fire and ample draught, so that a large volume of heated air plays on the bricks and oxidizes them thoroughly. With blue Staffordshire bricks the soaking process takes another form called smoking. An excess of coal is put on the fire and the air supply is reduced so that smoke fills the kiln.

In this, the third process of burning, we see a reproduction of what occurs in clamps. The air supply is insufficient to burn up the smoke in the kiln and the bricks are finished in an atmosphere that does not oxidize the goods but on the other hand, " reduces " the iron in them and produces a blue instead of a red colour.

The fourth process is salting. This may be used for three different effects—fuming the brick and producing a silvery grey colour, reducing the brick and so in another way getting the blue colour, or salt-glazing the bricks or sanitary pipes.

Salting is a simple operation and is done during the last few hours of full firing by throwing common salt into the fires. It becomes volatilised and the fumes pass over the goods in the kiln and form chemical compounds with the silica and alumina, which, in sufficient heat, fuse and form a more or less pronounced glaze.

The fifth burning process is that employed for high-class goods of various kinds, chiefly pottery and expensive tiles. They are placed in closed receptacles, either muffles or saggers, so that the flames and gases of the fuel do not come in contact with them. This process is the only one that can be called baking in the ordinary sense of the word, the muffle or saggar being a true oven with a fire playing round it. It is not used in brickmaking.

One of the remarkable features of brick burning is that though much heat is expended on the process very little is actually used. It is nearly all thrown away.

Raising the temperature of the bricks and driving off the hygroscopic and chemically combined water, uses heat in well-known quantities, but the process of turning clay into brick by heat uses none. This is a physical fact hard to understand, because as I have hinted earlier in my lecture, the coal consumed in the process is considerable in quantity.

For red bricks it is from 15 to 20 per cent. of the weight of the burned goods in intermittent kilns. The way in which the heat produced by the coal is used is mainly in keeping the bricks at a high temperature till the necessary chemical action has taken place.

Modern improvements in kilns have resulted in striking economy so that now we can burn them with 5 to 7½ per cent. of their weight in coal. The continuous kiln, first successfully applied in 1865, to brick burning is known as the Hoffmann. It is almost universally used for common bricks, saving the brickmakers 5 or 6 cwt. of coal per 1,000, and costing less also for labour.

I was successful in inventing an important improvement in this type of kiln in 1898, by which it was made possible to burn, the best class goods such as Suffolk reds, tiles, chimney pots, etc., as well as in the old Suffolk kilns, but with 60 per cent. less coal and with less waste.

The principle of the continuous kiln is the using over again as much as practically possible of the heat wasted. Even in these the loss of heat by warm gases going up the chimney and more notably still the loss by conduction through the massive walls of the kiln is enormous and cannot economically be prevented.

I cannot in the limits of this lecture go more deeply into these technical matters, but the points I have touched on so briefly, however, will perhaps have given you an unexpected insight into the wonderful amount of technical detail there is in the art.

Clay working bristles with technical difficulties, but in spite of that fact, many innocent capitalists have, in booming times, been persuaded that brickmaking is easy, and that given the money and an ordinary working foreman, anyone can make bricks. They have learned the lesson many a time too late, though they might easily have saved thousands of pounds by obtaining competent technical advice for a few guineas.

TYPES OF CLAY.

The clays that interest the brickmaker chiefly are the shales, marls and surface clays:

SHALE.

The Peterborough bricks or Flettons are made from an oily shale, another important centre using shale being Accrington. Shales are almost always made into bricks by the semi-dry process, although the plastic process may be used. I have already touched on this process, which is a mechanical one from first to last. In Peterborough, even the excavation of the shale is done with steam diggers on the largest works. The shale is brought straight from the bank to the machine, there to be ground to a granular condition. It is screened mechanically to the required fineness, mixed mechanically with a small amount of water if necessary, and then passed automatically into presses with rectangular cast-iron moulds for fashioning the brick. The pressing into brick form may be completed in one operation or the brick may be pressed a second time to improve its finish. Water in small proportion is necessary in order to obtain the cohesion of the fine particles or grains of shale. From the presses the bricks are taken straight to the kiln in which they are dried and burned in one continuous operation.

It is often stated that they are made dry and do not require drying. This is not true, but the amount of water in them is much less than in those made by plastic process, and they are sufficiently hard and strong to stack in position for burning direct from the presses. In the kiln they are dried first and burned afterwards continuously. In contrast to this, bricks made on the plastic system are too soft to be stacked in the kiln and must be dried first by one of the various means employed in the trade. The economy of labour in the semi-dry process over the plastic process is the chief cause of the cheapness of the brick made at Peterborough. Further causes are the price of coal, and the fact that burning in the kilns is assisted by the oil contained in the shale.

MARLS.

Marls are found in several parts of the country, the chief beds being in North Wales and Leicestershire. They are so called because of the presence of carbonate of lime in varying quantity.

Carbonate of lime or chalk has this peculiarity in connection with brickmaking, that when present in lumps or nodules it is exceedingly dangerous and destructive, unless effectively ground up or eliminated, but when in a fine state of division it is harmless. Marls rarely contain more than 5 per cent., but they require very careful selection and treatment, even when the proportion is much less.

The carbonate of lime when not finely divided becomes converted in burning into quick lime, which slacks when the bricks absorb moisture from the air with the result that the face becomes pitted through the lime blowing pieces off the face. Yet clay exists containing as much as 40 per cent. of carbonate of lime that may be made into sound bricks.

The white Suffolk brick clay sometimes contains this proportion, and the Cambridge Gault contains 33 per cent. The London stock brick clay contains 15 per cent. It is, however, in such a fine state of division, and so intimately mixed with the clay and sand that it forms harmless chemical combinations with them when burned.

Marls are plastic clays and in common with the Reading, gault and surface clays, when made into common bricks are treated by the wirecut system of brickmaking. I can, therefore, give you a short description of this method of manufacture as applied to these types of clay without referring specially to each. The clay is dug and conveyed in wagons usually by a suitable hoist direct to the machinery. This may consist of a brickmaking machine only, or preferably a train of machinery which gives a thorough preparation to the clay before it is finally pugged. This machinery may consist of all or either of three types. The grinding pan resembling a mortar mill is useful in working up a sandy non-cohesive clay to a more plastic condition than it possess in its natural condition. The bottom of the pan is perforated in parts and the rollers squeeze the clay through the perforations causing it to drop into the next machine.

Again, the clay may instead be passed through one or more pairs of rollers running at different speeds. These crush the clay, and any stones or lime contained in it, and at the same time tear it slightly by reason of their different speeds of running. From the pan or the rollers the clay may pass to a third type of machine, the mixer. This may be open or closed and have one or two revolving shafts. On the shafts are knives so inclined as to push the clay forward and mix it at the same time. The mixer may be about 6 feet long and horizontal in position. From the orifice at the end the clay drops into the hopper of the brickmaking machine. If required, water is added to the clay either in the pan or the mixer, but never in the rollers, as it would cause the clay to slip.

The brickmaking machine usually has a small pair of rollers mounted on it through which the clay is forced into the barrel. This again is horizontal and is furnished with a single shaft, and pugging knives similar to those in the mixer. These knead and compress the clay and press it towards the mouth of the machine.

At the end of the shaft a worm is placed which pushes the clay through the mouthpiece and die, and forms it into a continuous rectangular column of the correct cross section. The dimensions of the cross section correspond with the length and width of the brick allowance being made for the shrinkage in drying and burning about which I have already told you.

The column of clay is now finally cut off by wires drawn transversely through it, the wires being spaced the necessary distance apart to give the correct thickness of brick.

From the cutting table the bricks are wheeled to the drying ground, shed or other apparatus in order to be thoroughly dried before being stacked in the kiln for burning.

This briefly, is the routine of the mechanical plastic process. There is another intermediate process called the stiff-plastic which is used for some common brick clays. It is not of great interest, and need not claim your attention.

HAND BRICKMAKING.

I now have, therefore, to give you finally some description of the older process of hand brickmaking, which holds its own in certain parts of this country, in spite of the great improvement of machines in the last thirty years. It is the process used in the days of the Babylonians, Egyptians and Romans, and was that used by the first brickmakers in England up to the middle of the 19th century. It is to all intents and purposes the process used for all artistic terra cotta making in which mechanical aids are almost useless. Yet, strange to say, it is looked down upon with scorn by the countries far advanced in mechanical appliances, Germany and America, while it is practised almost exclusively in Belgium and Holland, and largely in France.

The hand brickmaking process is used for making stock bricks and red facings.

The clay is usually prepared for making by weathering, that is, by being spread out in layers in the open air, so that air, rain and frost may in turn act upon it and loosen it after its long confinement in the natural bed.

Weathering is practised, as well as what is termed resting, on other clays, and although the effects of it are apparent and the causes guessed at, no definite knowledge has been obtained as to the reason it is so efficacious. Stoney clays for hand-making are also washed, but those found free of stones do not usually need it.

The weathered clay is pugged or ground, usually in vertical pugmills driven by horse or steam power. These mills are essentially the same as the horizontal ones previously described and serve to mix the clay and incorporate the water and finally expel the mass in a condition fit for moulding.

Steel or wood moulds of the required size are wetted and rolled in fine dry sand and placed in position on the moulder's table. A " walk " of clay, as it is called, is then made by the moulder and rolled into a shape suitable for throwing into the mould. This walk is dexterously rolled in dry sand and, when ready, thrown with some force into the mould. The excess of clay is then struck off and the finished brick dropped carefully from the mould on to a pallet.

The final result and effect depends on a variety of circumstances. The surfaces of the brick may be fine and uniform or they may be wrinkled and coarse. The brick may be true and square or out of shape and deformed. These effects are due to the idiosyncracies of the moulder, who requires training carefully in the way he is wanted to go. The final colour and appearance depend on the quality of the clay and sand used, the kind of kiln, the method of firing; and the final temperature and soaking ; all matters requiring constant care and much technical knowledge.

The drying is an operation also requiring unremitting attention, and all the various materials, operations and skill combine to yield the final product, which may or may not produce adequate returns according to the demand and the success of the master in supplying it.

From all of which you will gather some further confirmation of a remark I made earlier in my lecture, that the paths of the brickmaker are thorny and by no means so easily trodden by a novice as some would be disposed to think.

The processes used in hand brickmaking are such as to afford to the clay the most perfect treatment from a physical point of view. The weathering, the slow pugging, the lengthy and complete drying, all tend to assist the clay molecules to adapt themselves to the altered conditions they encounter in their drastic change of state. At the same time, the ultimate result is not only sound physically, but it is in the highest degree artistic and durable, provided the processes of manufacture are all properly carried out. It is durable under all circumstances of environment ; water, frost, sun, and fire all alike, leaving it unharmed and unchanged. That this is so, the old examples of brickwork in East Anglia and elsewhere eloquently testify.

History.

We all know that brickmaking as an art is ancient and even prehistoric. The earliest bricks found in Egypt are said to be 12,000 years old, and we are often reminded that the Children of Israel had to make bricks for Pharoah and find their own straw. These bricks were made of Nile mud mixed with chopped straw and the clay was trodden by men, much as it was up to quite recent times in this country. The bricks were moulded and sun-dried, but not baked and would have been of little use in our climate. They were hard and served to build lasting monuments in that arid country.

The well-known Step pyramid of Sakkara is built of such bricks and was cased externally with marble slabs, now removed. It is the oldest pyramid in Egypt.

It is said that the Tower of Babel was built of brick, the record being that the builders said, " Go to, let us make bricks and burn them thoroughly." The walls of Babylon were built of bricks, and from the ruins the bricks have been carted away in modern days to build new cities. The burned ones were 13 inches square and 3 inches thick and the unburned ones of various sizes and they were set in bitumen. The great wall of China was built of burned and unburned bricks 2,000 years ago. It was 1,250 miles long and about 22 feet high. The walls of Athens on the side of Mount Hymettus were of brick, but the Greeks did not use them so much as the Romans, who were probably the first to burn them in kilns and to improve their quality.

In the first century A.D., they were of better quality than at any subsequent time, being then made about 2 feet square and 1 inch thick. Later they were made smaller and thicker, but by the end of the 4th century the art was practically lost until about the 13th century.

The glazed brick used by the Saracens in what is known as the Synod at Ephesus is interesting as being practically of the same clay as a red Suffolk brick and finished with a green glazed surface.

In England, as you well know, the Romans introduced bricks and brickwork in the 5th century, an example still remaining in Holy Trinity, Colchester. Colchester Castle, built in 1078, is largely of Roman bricks and also St. Botolph's Priory, built in 1116. The British people did not find the need of building in brick until the late 13th and early 14th century, because of the immense forests and abundance of wood, but they used clay as a filling between wooden external walls and board linings. Little Wenham Hall, built in 1260, is the earliest British building, the bricks being 9¾ by 2¾ by 2¼ inches, and mixed with courses of stone and flint.

These and many of the bricks used in the Tudor period were probably imported from Holland, an unpatriotic practice which has very unfortunately been followed in the last few years again.

The 15th century Tudor brick is quite equal in quality to the Dutch bricks imported recently into England, but I think, and I hope you will agree with me, that neither can be compared in quality with modern examples of English bricks of the same size. In Tudor times bricks cost 6*s*. per thousand. They varied a good deal in size from time to time, some being 12 by 6 by 3 inches, others 9 by 4½ by 1½ inches. In late Tudor times Terra Cotta began to make its appearance, such as is found in Wolterton Manor House, East Barsham, built in the time of Henry VII.

From Tudor times through the Renaissance period bricks continued to be used, and after the Fire of London in 1666, brick was generally used in the rebuilding of the City.

Late in the 18th century, and up to the middle of the 19th, bricks were taxed from 4*s*. 6*d*. to 10*s*. per 1,000, and during this period their use for facing work declined; stucco taking their place.

A great revival, however, occurred when mechanical manufacture became prevalent, and since that time one of the greatest booms in the use of bricks was witnessed in the revival of the Queen Anne style of architecture in the seventies and eighties. This was followed by the mushroom growth of the Fletton brick industry in the nineties, and a marvellous activity in the building trade about 1900, when bricks were in such demand that they fetched famine prices.

The Transvaal War put an end to this activity, and for the last ten years such dulness has characterized the trade that I do not think more than one-third the number of bricks have been made annually in the Fletton and stock brick districts, which supply London. Large sums of capital too are lying idle in many districts, because of the undue haste with which it was expended during the boom.

You do not require to be told of the present vogue for the use of bricks of the Tudor type for facing buildings of all kinds. The genius of many of our greatest architects has found expression during the last few years in this ancient material in work that is characterized by greater variety and charm than is to be found in any previous style, and I am sure no other country can show bricks or brickwork to compare in artistic excellence with that which has arisen in London recently, or in the Garden Cities around it.

Discussion.

The President said that when he was in Berlin some years ago, he was very interested to see the large quantity of lime-sand bricks in use there. They were made with sand to which was added about 5 per cent. of slacked lime. The bricks were moulded under great pressure, and placed in a large cylinder which was then hermetically sealed. The bricks were then permeated with steam forced in after which, when cool enough, they were ready for use. They appeared to be in every way satisfactory, and it seemed extraordinary that such a simple form of manufacture should not have found more favour in England. He thought they were being made by one firm at Reading, and possibly the lecturer could tell them why they were not more generally made in this country.

Mr. Clement J. Broad (Ex-President of the Clayworkers' Institute), in proposing a vote of thanks to the lecturer, mentioned that Mr. Brown had said very little about the old clamp process of brickmaking. The London stock brickmaking was divided into two classes, of which the malm brick was made from the milder class of clay found beneath the top spit to a depth of three or four feet. The ashes used for these bricks were finely sifted so as to produce a better class of brick. Thirty or forty years ago, malm bricks were generally used for facing purposes, and were divided into several kinds, the best of which were called malm cutters. The holes in the malm cutter were caused by the burning out of the ash in the brick, and many architects were under the impression that a malm cutter could be made without those holes, forgetting that they were not made like a red rubber. There were two ways of producing the stock brick, the flat digging process and the washing process. In the former, the first foot or so of soil was removed, exposing the clay. This was known as uncallowing. After that the clay was covered with ashes derived from the dust bins of London. In the old days the contents of these were sorted at the various wharves. Vegetable matter was called soft core, and after tins and such like matter had been sorted out, the residue was converted into ash and breeze. Ash was the fine residue mixed with the clay; breeze was the coarser material used for putting in the bottom of the kilns to form the firing. The quantity of ashes distributed over the uncallowed clay depended upon the depth of the clay itself. It was then " shuffled " in by the men in a peculiar manner with their feet, until the mass was of an almost solid consistency. The next process was to dig down, throwing the soil with the admixture of ashes back and over as the men went along. After that it was usual to distribute chalk wash conveyed by troughs over the surface and then it was left to weather until required for moulding into bricks. In the flat digging process the hacks either had to follow the clay, necessitating the shifting of the kiln from time to time or providing extra run from the hack. The washing process had the advantage of allowing fixed hack grounds, the difference being that after uncallowing as before and mixing the ashes with the clay the mixture was conveyed to a mill where it received its first washing. There was also usually a chalk mill in which chalk was added to the clay and the mixture run by troughs into hacks prepared for its reception, where it was left to dry. Lime was sometimes used for hardening the mixture. As a rule the washed brick earth produced a better brick than by the flat digging process. In the former method all stones were removed in the process of washing, and a better colour was obtained, although in most cases it was necessary to mix chalk with the lime to produce the colour. The bricks after being moulded were taken to the kilns for burning, and the brickmaker's greatest difficulty was in regulating the burning to the various kinds of bricks in the kilns. Many architects specified picked Stocks for facing purposes, allowing the builder to use Flettons for the inside, which placed the brickmaker in a difficult position in regard to his inferior bricks. The ordinary production of a clamp were known as Hard Facings. They did not get colour and hardness together, a bright coloured brick being usually soft. Hardness in a brick was usually accompanied by a loss of colour. Hard Bright Facings was another brick, Yellow Facings a softer kind, First Hard Stocks the best of ordinary Stocks, and Second Hard Stocks which was a new thing in brick Stocks quite good and hard, but lacking the squareness of the first hard Stock. Then there was the Mild Stocks of which he suggested architects should use more. Single

Roughs used for foundations, and lastly Place which were mostly used by speculative builders. He did not agree with the oft-repeated statement that bricks were better made in the old days than in the present. If people would pay the price they could get a good brick. The lime-sand bricks mentioned by the President were being made in England in small quantities. London Stocks were in his opinion the best bricks to withstand the atmosphere, and he had never known a case of one failing. There was no business in which so much money had been lost as in brickmaking, and he hoped that when there was an appreciation of the better classes of bricks, as there was undoubtedly a tendency towards better architecture, more pleasure and profit might be derived from the industry.

MR. HERBERT FREYBERG, F.S.I. (Member), in seconding the vote of thanks, asked how long the clay should be allowed to weather before being moulded into bricks. In travelling about, he had observed that whereas in the old days the makers used to damp their clay in the early autumn, they now appeared to start about early spring, ready for the summer baking. He was very glad to hear on such scientific authority as the lecturer that the ordinary brick was also sanitary. He believed that at one time there were certain taxes on bricks, a custom which he would like to see revived in the case of the hard unsympathetic red brick.

MR. ELLIS MARSLAND (Past Honorary Secretary, President of The District Surveyors' Association), asked whether the lecturer could inform them why it was that the Israelites used chopped straw in making their bricks, seeing that the latter were not burnt. The history of brickmaking in the City of London was somewhat interesting. The control of the trade rested with the Tylers' and Bricklayers' Company, whose duty it was to see that the bricks were made the proper size. The Company was at that time divided up into search Committees who had to visit the various brick-fields around London and fine the makers if the bricks were not made the correct size, and also to see that the bricks were properly burnt, and that sea-coal ashes were not used in the latter process. There was a tax put upon bricks in the 18th century, which, however, did not last long, as the Company who collected the tax of one half-penny per thousand had to transfer half of it to the Crown, and eventually the Act of Parliament which they went to considerable trouble to get passed was repealed.

MR. H. T. COVER (Member), stated that some specifications stipulated that no bricks with "frogs" would be permitted, and asked the reason for the prohibition which he suggested might be to insure getting a machine-made brick.

MR. CHAS. H. NORRIS, said he was making red sand-faced bricks in Kent, and his chief difficulty was in obtaining labour which would enable him to make bricks at a selling price. That was a factor which he hoped all architects would bear in mind when dealing with brickmakers, especially in view of the sorting which had to be done over and over again to give them the brick in demand. A previous speaker had inferred that there were no longer any taxes on bricks, but he assured them that the taxes in his district were many and great. With regard to the damping of clay, at his works it was washed and re-washed frequently. They finished making in the autumn so that the clay could have the effect of the frosts on it which made the water rise to the surface. It was then drained off, when the clay was left for what was called " soilage " in the spring. Many makers, however, got into a lax way in leaving their washing until late in the spring, when it did not have the effect on the clay that it should have.

Mr. L. George Collier suggested that the Israelites used straw in making their bricks for the same reason as present-day brickmakers used lime, not only to bind the clay together, but to allow it to be worked so much more easily. He put forward this theory in view of the fact that a hardship was implied in making the bricks without straw. He also suggested that possibly the Germans had not the clay at their disposal that they had in England, nor the means of making bricks from it as cheaply as in the Fletton district. Mr. Brown had very rightly dwelt on the importance of the proportions of clay necessary in good brickmaking. In the Reading district they were unable to make bricks direct from the pit, because the clay slipped down into irregular quantities of clay and lime, and it was necessary to dig out the layer so as to ensure a proper proportion.

Mr. R. George Bare (Past Honorary Librarian), asked whether a Fletton brick was a permeable or a porous one, and whether the Mild Stock brick which had been advocated for use for interiors was sufficiently hard for the purpose. The price of bricks was a most important question affecting practically the whole of the building trade. Architects should realize when specifying good sound bricks that a fair price must be paid for them.

The President, in putting the vote of thanks to the meeting, said they had all gained considerable information from the paper and the discussion. Quite recently he had seen the whole process of brickmaking under the most comfortable circumstances, on the cinematograph. The film showed the hand-making and the machine-making processes, the inside of the kilns and the clamps, the unstacking, etc., and it was very instructive to see the finished article placed back into the mould to show the shrinkage. It was to be hoped that these films would be shown at the various technical schools, and so prove a very valuable method of increasing the technical knowledge of the industry. The vote of thanks was then carried with acclamation.

Mr. Arthur E. Brown, in reply said he was thoroughly *au fait* with the lime-sand bricks so much in use in Germany. They had many defects, the chief of which was that the lime did not combine chemically with the sand, and he was rather surprised that the Germans used them in such quantities. In England, they cost considerably more to make than any other type of brick. With a clay brick the carbonic acid in the atmosphere acted upon the lime and sand used in the mortar and formed a chemical combination with the surface of the brick and hardened into a solid structure. It had been extremely interesting to hear Mr. Broad's explanation of Clamp brickmaking. With regard to the question of hardness of Stock bricks it was astonishing how little the engineering side of brickwork was understood. Many experiments had been made as to the crushing strain of bricks, but it was not generally realized what little strain a brick had to withstand in a building. For ordinary purpose where the loads were distributed a brick was very much stronger than it need be, and an ordinary Stock brick would stand all the strain placed upon it. He had supplied Red Facing bricks for a chimney shaft 240 high. These bricks were no harder than an ordinary red sand-faced brick, and although there must be a very heavy pressure at the base of the shaft no sign of cracking was apparent in the bricks. The low prices of bricks, was perhaps due to some extent to the fact that the business of brickmaking had been taken up by many people as a side line. It was almost impossible to say how long the clay should weather before making into bricks as clay had its own idiosyncrasies. In Ruabon, where a very heavy rock marl was found, the clay ten or fifteen years ago was broken up by men with small hammers, although they now had crushing machines which weathered the clay at the same time. In their particular case it was found that the weathering could be reduced to about five days. Some clays, however, required one week's weathering to produce a satisfactory article. Another must be out at least a month, and in certain cases of hard clay three months were required before the material was sufficiently disintegrated, and in the necessary condition to produce a sound article. He hoped Mr. Collier's theory with regard to the use of straw by the Israelites was the correct one, but he had no information on the subject. With regard to the objection to the use of bricks with " frogs," he thought it was always the other way round, and was surprised to hear what Mr. Cover had said. Many engineers believed that bricks with " frogs " were not conducive to good work, asserting that the " frogs " held water, which of course was not the case. The porosity or permeability of a Fletton brick did not arise as it was not made in a plastic state. With regard to the prices of bricks, the makers were, he thought, among the foolish ones of the earth, in that they did not value combination. Brickmaking was the only branch of the building trade to which combination was not and could not be applied ; a circumstance arising from the fact that there was no external competition.

Architects and Materials.

The very able lecture, reproduced in this issue, which Mr. Arthur E. Brown, B.Sc., read before The Society of Architects on the 12th inst., compresses within the small compass of some six pages the accumulated knowledge of a lifetime on the subject of bricks and brickmaking. Mr. Brown, of course, occupies the unique position of being at once a scientific expert and a brick manufacturer, and, therefore, architects can accept with confidence his conclusions, even upon such thorny questions as the value of porus bricks. Indeed, for building purposes his very clear remarks in this connection are probably the most valuable part of a valuable exposition. After pointing out that shrinkage continues till arrested by the grains getting as close together as possible, Mr. Brown explains that the size of the pores in the bricks depends on the size and shape of the grains ; thus, whilst all clays become porous when dry, those with the larger angular grains are permeable even before drying, the result being that a permeable brick will better resist the weather, and will also allow the air to pass through the walls. He continues : " Provided the wall is not too exposed to constant driving rains, in which case it should be built hollow, the water dries out very rapidly when the rain stops. In our variable climate the permeable brick will usually dry out completely between the rain periods and before any water has penetrated the wall, and will again let air through. The porous brick will not, because it takes proportionately longer to dry than it does to wet. The second point is the effect of frost. It is well known that water expands just before freezing. That is why it cracks out water pipes. The same thing happens inside a brick, but when the water in a permeable brick freezes, the holes are large enough to let the ice squeeze out when formed, and no harm is done. In a porus brick (that is one with extremely fine pores) the ice cannot squeeze out for the same reason as you cannot blow through a minute tube, and so it bursts the face off the brick instead."—F.R.I.B.A. in *The Brickbuilder.*

The new Roman Hill School at Lowestoft is situated in the west end of the borough, and accommodates 500 boys. A new type of plan has been adopted, in which the assembly hall is disconnected from the classrooms. The hall is placed in the centre of the school, and the classrooms arranged in two wings, one on each side of it. Each wing has six classrooms, three on either side of the central corridor, with cloakrooms, lavatories, and two entrances. Two teachers' rooms are provided. The buildings are warmed by a low-pressure hot water system, and lighted throughout by electricity. The architect was MR. ABEL ROUND, of Birmingham.

The requirements of a Church Organ which should be taken into account and provided for by the Architect.

FIRST, provision for the motive power required for wind. If a gas engine is used it must be entirely outside the walls of the church, that the poisonous gases of the exhaust may not contaminate the air of the interior of the church.

A noiseless electric motor is generally the most convenient and economical source of power, and for safety from a short circuit it must be placed in a fire-proof cell in the crypt, the shaft being carried through a substantial brick wall, properly bushed to the fan or feeders in a sound-proof compartment under the church. As large quantities of air will be withdrawn from this chamber by fan and feeders, openings for the supply of clean air, free from dust, fumes or damp, should be provided. A silent fan must be used. Should any *vibration* from this present a difficulty, it may be dispersed by a short length of strong leather in the wind-trunk between the fan and the reservoir for wind. This reservoir should be of a fair capacity in proportion to the size of the organ, with an automatic governor to control the electric current. Also a separate reservoir is generally required at a higher pressure for the action, special harmonic stops and reeds. The tremolants for the swell and choir, and possibly for certain stops of the solo organ, should be in this part of the crypt, that the panting sound which they make may not be heard in the church.

It is desirable to have a second blowing plant of smaller power from another source. For this a water engine to blow with feeders, and any water pressure from 40 lbs. will pay. This second blowing plant is very useful for private practice, and as an auxiliary or alternative when the electric current is off. This also will have an automatic control from the wind reservoir governing the supply of water to the engine. It should be enough for the full choir organ, and the soft pedal stops for use with the same.

The organ should stand on a floor of stone or cement, and the walls if at all near, should also be of stone, or with a cement surface, not nearer than 4 ft. The space around the organ is not wasted, but improves the tone and allows access to every part of the action. Overcrowding should be avoided, every pipe having room to speak without the tone being deadened or modified by the presence of some obstruction too near the mouth, or the top of the pipe.

The worst foundation on which to place an organ is the common one of a wooden gallery, the floor of which acts as a resonator, to reinforce and render audible the sound of every motion of the mechanism which is at the base of the instrument. This fault is responsible for an occasional squeak on the motion of some rod or tracker, or the puff, puff of pneumatic valves being heard, of which there are a thousand in a moderate-sized organ. The closing of the folds of a bellows on this wooden floor will give out peculiar sounds of the friction of leather upon leather, with a gasp and final groan when the last fold closes. The vibration of the lower notes is also liable to be transformed into sound and wake up an independent note in any loose wood or glass near, and give out a discordant tone not in the same key as the organist's copy, very much to his distraction.

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* [This article is contributed by one of the few learned and experienced experts in Organ Building in this country.—Ed.]

The case, upon which large sums are often lavished, is solely for ornament, and quite unnecessary for music. A brick or stone chamber to enclose the organ is an abomination which dulls the sound, hinders its diffusion, and frequently cramps the proper distribution of the instrument. It is quite an ideal arrangement when the organ can be placed *entirely out of sight*. The console being fixed where the organist can see the choir and the ceremonial of the service, both in the chancel and the nave, and can hear the choir and the organ to the best advantage, and also to some extent the singing of the congregation. If pneumatic action is employed, the distance between the console and the organ should not exceed 50 ft., but if electro-pneumatic action is used the distance may be indefinitely extended.

The space to be occupied by the organ in a church is almost always under estimated. The visible organ case is popularly supposed to contain the organ. It did formerly, centuries ago, now it generally contains the choir organ and little else. In a cathedral, the crypt and the triforium afford ample space for the organ, but rarely in a new church, and then only when the Architect has been advised by an expert is reasonable provision made, as at All Saints, West Dulwich, where there is sufficient space over the clergy and choir vestries, with the great height of the church for a large organ to stand south of the chancel. In a similar position on the north side of the chancel is accommodation for a Miriam choir (ladies'), and an orchestra with a separate staircase. When these are in use the occupants are entirely out of sight from the nave, and can come and go without being seen by the congregation. But this consideration and arrangement of detail is rarely found in church building. The modern church is generally built as a place to preach in, without any consideration of what may be required for the organ.

The Organ Builder having obtained the contract, with the specification written in the most vague and indefinite terms, but with the number and names of the stops, and the amount to be paid for the same clearly stated, he will proceed to plan by actual and careful measurement the place for each of the larger pipes in the space he will be allowed to occupy. He may find the height is not sufficient for the longest pipes to stand upright, nor wide enough for the longest flue pipes to be placed horizontal. He is, therefore, driven to the use of shorter pipes with such modification as he is perfectly familiar with, which will give the correct note, with a certain loss of tone and quality at a less cost. That will meet the requirements of the organist. The greatest mass not to be divided is the swell box. To find a place for this is often very difficult. It must contain all the stops on the swell manual, and should include pedal pipes for this part of the instrument. The necessary room not having been provided, he is quite content to leave these pedal pipes outside the swell box, with great loss of effect, but still a decrease of expense to the builder. The choir organ will also need the enclosure in a swell box of its expressive stops which should include certain pedal pipes for use with the same. These will also be subject to the same treatment as the corresponding pipes in the swell. There is nothing in the specification to hinder such arrangement.

The Architect will have no instructions of any value for his guidance from an organ committee, whose qualification is finance ; nor in one instance in a thousand from the organist, who is an artist, to whom mechanical arrangements of so complicated a machine as a modern organ is entirely foreign. He is already over-burdened with studies which he must master, the theory and practice of music, vocal and instrumental. The art of composition, the training of the voice, management of a choir, and the control as a conductor of both choir and orchestra. He must have the technique of the organ and piano at his finger ends, and retain it by constant practice. He may also be proficient as a performer on some one instrument of the orchestra. These qualifications are necessary to his success ; possessing them it is scarcely possible for him to become also master of the art of organ building. That is a separate study. It has a literature of its own, the most important works of which he has probably never seen, certainly never studied. The best of them are expensive, voluminous and rare. Besides smaller works, he must, to attain knowledge of value, know the works of Dom Bedos, Topfer's reduction of scales to a scientific basis, the work of Herr Schulze, the inventions and tables of Aristide Cavaillé-Coll, the calculations of Robertson, and have studied the greatest modern work on the subject, Dr. Audsley's Art of Organ Building. He should also have seen something of organ building in the workshop, and have examined the interior of organs by the great builders, German, French, English and American.

Without such study and experience it is impossible for the organist to do himself credit, or the church any service, by undertaking to advise or direct either the Architect or the Organ Builder. The result is that in England, the business of providing a church organ is in the hands of a tradesman, the Organ Builder, without guidance or control, and his first duty is to make his business pay ; that he always attends to.

The construction of a church is not now left in the hands of the churchwardens, when that was done in former years, "Churchwarden's Gothic" was the result; but every wise church authority now places the construction of the building in the hands of a qualified Architect and an expert Clerk of the Works. No sane congregation would consign this work to the stonemason, bricklayer and carpenter. Yet, the counterpart of this folly is done frequently when an organ is required. The Organ Builder has no interest in calling attention to details, his point of view as explained by one of the largest Organ Builders in this country is: What amount of money will his client be willing to spend upon the organ? Having ascertained this, he proceeds to work out the specification with the organist. The organist's requirements as to the stops are certain *names*. If those names are on the stop knobs at the console, he is satisfied, with such arrangements of the action as will suit his style of playing. Of what shape, scale and material the pipes should be made, except that some should be wood and some metal, but what kind of wood and what description of metal should be used, if pure tin or lead, or an alloy of those metals, in what proportion and at what price between 2*s*. per lb. and 2*d*. per lb., would be required. If zinc would answer quite as well, as some builders assert, or lead stiffened with antimony, both cheap substitutes for good metal, or of what thickness the pipes should be, he is not prepared to define or name, nor to recognize when he can see them. Metallurgy and the working of metals not having been any study of his.

There should be no window into the interior of the organ. If the Architect requires a window where the organ stands, it should be built up inside the glass. The cold of winter, and the sunshine of summer, must be both excluded; an even temperature is required. The organ is only in tune at the same temperature at which it was last tuned, that should be as near as possible 60°F. The whole interior including the swell box, keyboard and pedals should have electric lights, for inspection tuning and repairs. The use of a candle inside the organ should be absolutely prohibited.

Some idea of the height required for an organ may be obtained by considering what is necessary for the most important stop in the instrument, the open diapason. If the church is small with not more than 200 or 300 in the congregation, the open diapason of metal 8 ft. standing on the sound-board can be placed upright to sound its proper note in 14 ft. But if the attendance be 500 to 750, a 16 ft. open diapason must be provided, and will require a space of 25 ft. between the floor and roof or ceiling. If the church is large seating, 1,500 to 2,000, a 32 ft. open diapason should be in the organ, and a height of 50 ft. is absolutely necessary. The scale of the stop being in proportion to the area of the building.

The reason for the height required will perhaps be seen more clearly by considering the height necessary for a 16 ft. open diapason metal pipe CCC, to stand upright and speak correctly :—

	ft.	in.
Sound-board or air chest on the floor	0	9
From foot of pipe to the lower lip	2	10
The open mouth	0	2
From the upper lip to the opening of the tuning slot ..	16	0
Pipe continued from tuning slot to top of the pipe ..	1	3
Space for the pipe to sound	4	0
Total space from floor to roof ..	25	0

The above is the exact detail from actual measurement, and is a minimum, more height above the top of the pipe is desirable. A wooden pipe for the same note may be placed in a space 2 ft. less. The foot of the pipe being less in depth. When open metal pipes are used for display in an organ case they are often made longer than the measurement here given. The inverted cone of the foot being extended to give a graceful shape and the top of the pipe also made longer in proportion. For this, 2 ft. or 3 ft. extra may be calculated as needed for the 16 ft. pipe and the same in proportion for the 8 ft. and 32 ft. pipes.

A Lesson in Professional Etiquette and its Sequel.

The Board (Camberwell Board of Guardians) had a lesson in professional etiquette from architects. They require some painting done at Constance Road workhouse, and wrote to two architects for their terms. They did not know that architects, according to the rules of the profession, are not permitted to enter into competition. Prices are fixed by their Associations and they adhered to them. Let the Board choose. The Board, however, did nothing of the kind, but sent the matter to committee to find out who had blundered in trying to get architects to cut down their fees.—*South London Observer.*

The Guardians want some building done, and had the impudence to ask Mr. A. E. Mullins, architect, to put in his estimate. Now architects have begun the Social Revolution by knocking the demon competition on the head. When all other trades and professions become as wise as the architects there will be no need for Boards of Guardians. Mr. Mullins wrote that he was a member of The Society of Architects for 25 years. He was liable to be struck off the register if he did what the Guardians asked.—*The Dulwich, Peckham and Camberwell Post.*

The Guardians have since instructed Mr. Mullins to carry out the work, and have agreed to pay him the customary fees in accordance with the Schedule of professional charges.

Barnsley Town Hall Competition.

TOEING THE LINE.

The Barnsley Town Council have decided not to amend the conditions, and the Competition therefore remains barred by the Society. A letter from the Secretary of the Society appears in the *Barnsley Chronicle* for March 14th, urging the Town Council to reconsider the matter in the interests of the community. Our contemporary in its leading article on March 21st thinks that the townspeople generally will approve of the stand which the Town Council has made in this matter. The appointment of an assessor to select the six best plans is professionally acclaimed as the right and proper thing to do. But what is objected to by the architectural societies is the very reasonable condition that the Council reserve to themselves the right to select any of the six designs which the assessor places first. What is there unfair or prejudicial in such a procedure ? . . . . Surely the Town Council may modestly claim that even people who do not happen to be professional architects may be fairly credited with possessing some idea of what is effective and pleasing in architectural design. The professional people do not quite absorb or monopolize all the taste and talent in the country. Our point is that, just as it is not absolutely necessary to be a great professional singer in order to recognize and appreciate a good song, so also other people beside professional architects can judge of what is beautiful and striking in the elevation and design of a public building. Moreover, it must be borne in mind by the architectural societies that the Town Council are the elected and responsible representatives of the ratepayers who find the money, and, therefore, as the Secretary of The Society of Architects admits, have the right to call the tune. An assessor is a very useful functionary, but it is by no means invariably the case, as the architectural societies seem to suppose, that he over-rides every other authority and personage in the particular sphere in which he is called upon to act. . . . . Surely in this matter the Council may modestly claim to be " master in their own house." Something facetious has been said " about toeing the Corporation line." It may be pertinently retorted that the " toeing " business is on the other side in view of the special efforts that have been made in certain quarters to bring architects into unison so as to avowedly " ensure as far as possible the whole of the profession coming into line." Architecture is now a definitely organized profession. There can be no objection to this, but some people may be inclined to think that their societies might be a little less sensitive. Years will probably bring them added wisdom, and doubtless temper their present zeal with more sweet reasonableness.

[The announcement of the Assessor's name and award, and of the names of competing Architects (if any), will be awaited with unusual interest.—ED.]

Reviews.

Carpentry and Joinery. A Text-book for Architects, Engineers, Surveyors, Craftsmen, and Students. By Banister F. Fletcher and H. Phillips Fletcher. Fourth Edition, Revised and Enlarged. Cloth. 8vo. 324 pp. 7 in. by 5 in. by ¾ in. London: Whittaker & Co., 1914. Price, 6*s.* net.

This little work is particularly suitable for architects as it deals with the craft of the carpenter and joiner in a more artistic manner than the usual text-books do. A novel feature of the work is that lecture diagrams from which the illustrations have been prepared can be obtained from the authors by teachers of technical classes. The book opens with a readable introduction, describing the rise of wood working. In the first chapter a judicious selection has been made of the varieties of timber in use and their characteristics described, but a slip has been made in describing alder as of a light red colour, its natural colour is a cream or very pale buff. Birch is described as a white wood, but it is more the colour of beech. Lignum vitæ is a brownish-green. It should have been mentioned that Kauri pine is very apt to split in nailing. Seasoning logs of timber by boring a hole down the centre is rather more theoretical than practical, one feels pity for the man who attempts it. By Bouchere's process of seasoning, it is presumed that Boucherie's is intended, and by Burnetising is meant Burnettising, introduced by Sir William Burnett. Powellising is not mentioned, although that is a modern and very effective method of preservation. The tools used by the carpenter and joiner are concisely described and clearly illustrated, as are also the principal joints used in framing timbers together. Roofs are systematically described from the simple lean-to up to the hammer-beam truss. In the detail of the gib and cottar joint at foot of king post, the mortise is shown too high up; it should be through the wide part of the post but not low enough down to tear through the fibres. The chapter on bridges is somewhat sketchy and mainly historical, a few practical diagrams of foot-bridges up to 60 ft. span would have been of more value. The formula given for the scantling of a needle to support a wall on dead shores is not correctly stated. For instance, a needle to support a load of 12 cwt. or 1,344 lbs. in the centre on a span of 6 ft. should be about 6 in. deep by 4 in. wide, while the formula would make it less than 2 in. deep if 4 in. wide, or 2¼ in. wide if 6 in. deep. The same formula with an altered constant is used for posts. The chapter on centering is very brief and mostly historical, but it is made up for by a better one on scaffolding, stages and gantries. The chapter on pillars, beams and girders is very short and very disappointing, most of the examples are ancient and wanting in detail. The authors are more at home in the chapters on floors and floor coverings, but one would like to have seen larger details of such matters as herringbone strutting, with information as to the exact method of fixing; apparently the book is written for architects and not for carpenters. The principal joints in joinery and the various architectural mouldings are described and illustrated to a good scale. The illustrations of doors and windows are fairly complete, although a larger scale would have been preferable; skylights, lanterns, and staircases are treated in similar manner. The chapter on shaped work in domes and niches, and that on bevels, are useful and would have been more presentable if the graining on the wood had been omitted. There are two other practical chapters on setting-out rods and workshop practice, and the book closes with its longest chapter on artistic craftmanship, with some good little sketches of "bits." For architects desiring only a general knowledge of carpentry and joinery, this book may be found very suitable; but the practical carpenter, or the student in the trade class, will hardly be satisfied with the information contained, when he has access to standard works, such as those by Ellis and others.

An Introduction to English Church Architecture, from the Eleventh to the Sixteenth Century. By Francis Bond, HON. A.R.I.B.A. (*Hon. Member*). In 2 vols., with 1400 Illustrations. Humphrey Milford, Oxford University Press.

The greatest modern writer upon Gothic Architecture has produced another exhaustive work (though he himself styles it a mere Introduction) in connection with a subject which most of us must have thought he had already exhausted; and he has done it without repeating himself, except in a few necessary cases, producing much information which is new both in substance and form, and particularly in its application. Especially is this the case with regard to the influence of ritual upon the planning of the English Mediæval Church. Vaguely only have previous writers upon architecture remarked upon this, but Mr. Bond makes so much of it as to devote the earlier part of the present book to a description of the various orders of monks, canons and friars, and of their different requirements, as also of those of the normal parish (secular) priest. Besides this, there is the important fact that each parish church has a history of its own, to be discovered only by personal and painstaking examination of the structure itself, often a labour of love extending over a long period; for a contemporary written history of a parish church is exceptionally rare. A few examples exist, it is true, of "churches practically complete and intact, representative of every epoch of our long island story," and Mr. Bond duly records and illustrates them; but he goes on to say that, "In very few, however, have we the artistic charms of a design, complete, consistent. In most the interest is primarily historical.... Their charm is the charm of picturesqueness....Only remember that none of this picturesqueness was *designed*. It is only a modern draughtsman who invents picturesqueness." These last two sentences deserve to be printed in letters of gold, and with them a necessarily short review may well be brought to a close—with an exordium to read the book right through from cover to cover.

Some of the works recently done by MR. T. GERARD DAVIDSON include designing the Pavilion for the English Section of the Amsterdam Shipping Exhibition, 1913, carried out by Dutch contractors. Owing to the nature of the site, piles 45 metres long had to be driven in groups of four under the main supports. The Church of St. Matthew, Stalling Busk, Yorkshire, from the same architect's designs, was built of native limestone rock, at a high elevation between Wensley and Wharf-dales, and overlooking lake Sennawater, at a cost £750. The seating accommodation including Choir and Clergy is 86. No. 14, Victoria Road, Kensington, W., also from Mr. Davidson's designs, is built of brindled bricks with light Mansfield stone dressings and plinch. It is roofed with Loughborough brown-red tiles. The staircase and hall are of wainscot oak. There are four sitting rooms, a studio 30 by 20, with gallery, large hall, eight bedrooms, dressing room, and two bathrooms. The cost was £3,750. Upon the removal of the old building, traces of a much earlier building—including a well—built with various red bricks were discovered, no bottom to the well could be found by rods driven in to its earth filling.

Registration News.

At the Meeting of the Council of the Preston Society of Architects, the following resolution was passed unanimously :—

> " That the Members of the Society having always approved of the principle of Registration of Architects, do give our cordial support to any proposed legislation for this purpose, and that a copy of this resolution be sent to the Members of Parliament representing Preston, requesting their support of such a Bill when presented to Parliament."

The Provincial Architects' Association of Saskatoon, Sask., now desire powers similar to those granted by the legislature to the legal and medical professions, and application to this end will be made at next session. The association particularly desires to be able to deal with such cases as that which recently came before the courts, in which a man was charged with collecting fees for architectural work, although not registered as a member of the profession.

The South Carolina State Senate rejected, on January 27th, a Bill defining the qualifications for the practice of architecture in that State, and providing for the licensing and examination of architects. In the debate it was freely stated that the Bill would, in effect, create a monopoly in the practice of architecture. The clause to which particular objection was taken was the one reading as follows :—" Any person practising architecture in this State without a license shall be guilty of a misdemeanour, and subject to a fine of one hundred dollars, for each and every day so practising, and shall not be entitled to recover compensation for his or her services." —*Building News.*

VIEWS OF THE DENTAL SURGEONS.

In view of some of the difficulties under which Dentists carry on their profession under a Registration Act (the Dentists Act), the following extract from an Editorial in *The Dental Surgeon*, will be of interest in showing that the Society's Bill is regarded by those well qualified to judge as being on sound lines.

It is worthy of note, says our contemporary, that The Society of Architects has prepared for presentation in the forthcoming session of Parliament a Bill to provide for the registration of architects, though it is of course by no means certain what its fate there will be, supposing it is read a first time.

Nevertheless, seeing what the dentists' experience of registration has been, it may be of interest to examine the provisions of the proposed measure. In the first place accordingly it will provide that all architects in *bona fide* practice at the time of its passing shall be permitted to register, and that thereafter registration shall be limited to such as have been properly educated and have proved their proficiency by proper examinations. As in the case of the Medical and Dentists Acts, the object of the Bill is to enable persons requiring professional aid to distinguish qualified from unqualified practitioners. It is accordingly proposed to establish a Council of Architectural Education and Registration of the United Kingdom. The Council is to consist of (1) persons nominated by his Majesty with the advice of his Privy Council ; (2) architects chosen by the Council of the Royal Institute of British Architects, the Council of The Society of Architects (founded 1884), and the Council of the Royal Institute of Architects, Ireland ; and (3) architects elected as direct representatives by registered practitioners.

We regard this last as a most important provision since such representation is entirely denied to dentists. Registered medical men have, it is true, a certain amount of direct representation, but it is quite inadequate, and in this connection the hope may be expressed that the main body of architects will insist on being properly represented on their governing body to be thus created.

The Bill provides that after January 1st, 1915, no person shall be entitled to take or use the name or title of architect unless he be registered ; and any person who not being registered takes or uses any such name shall be liable to a fine not exceeding £20, and on repetition of the offence £50. This is certainly an improvement on the penalties in the Dentists Act, since in this no increase in the penalty for a repetition of an infringement of the Act is provided for.

No person is to be entitled after January 1st, 1915, to recover any charge in any court of law for any professional services rendered as architect unless he is registered under the Act. This, again, is a very different thing to the loose wording of Section 5 of the Dentists Act, owing to which, with all deference to Judge Moss,* it is open to the unregistered to recover for artificial dentures as materials supplied and work done.† It is beyond question that had the 1878 Act provided that no unregistered person should be able to recover in a court of law payment for any dental services rendered things would never have come to their present pass.

Amendment *per se* of this particular section in this direction would now be obviously impracticable and indeed inequitable, but it is clear that had this section been properly worded, there would not be now anything like the present number of unregistered persons engaged in the practice of dentistry. The law would have rendered this less worth while going in for without registration.

No doubt the drafting of the section in the case of dentistry would have presented some difficulty, since it would have been necessary to provide safeguards so as to exempt the perfectly legitimate working of dental mechanics in situations or on their own account for the profession.

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* *Dental Surgeon*, vol. x, p. 12.

† *Cf.* J. N. Morton on "The Law relating to Medical Practitioners and Dentists in Great Britain," p. 72.

Very properly, of course, the right of members of the Institution of Civil Engineers and other bodies to recover charges " for work of any kind falling within the duties of their calling " is untouched. Just as the rights of medical men were respected under the Dentists Act.—*The Dental Surgeon.*

SOUTH AFRICAN CRITICISMS.

Our contemporary, *The South African Architect,* in its February issue, devotes considerable space to a resumé of the registration movement in Great Britain and a critical synopsis of the Society's draft Bill. The present position is that the R.I.B.A. and the Society emerged from their negotiations for amalgamation, distinct in entity, but pledged to Registration both. Latest reports, however, go to show that the Royal Institute is now dropping Registration in favour of a movement to obtain a further supplement to its own Royal Charter ; the Society holds to its original course, and has taken a forward step by publishing the text of a Bill to be presented to Parliament in the coming session.

Stripped of non-essentials, the Institute's proposals amount to obtaining Royal sanction for its members—Fellows, Associates and Licentiates—to entitle themselves " Chartered Architects." If, as seems to be the case, this is put forward as the solution of the problem for which Registration was devised, the mountain would appear to have laboured and brought forth a somewhat ridiculous mouse !

The Society's proposals are embodied in a draft Bill, the full text of which appeared in the *Building News,* of January 9th last. It may be of some significance to note that there is no conflict between the two sets of proposals, *i.e.,* both might be brought into effect. Possibly the Society is to have the honour of achieving that for which it was primarily founded. We congratulate the Society upon this seeming, and wish we could do so more fully in the sense of commending the details of its proposed measure.

There is excellent historic authority for maintaining that a good law-maker should also be a good prophet. We in the Transvaal have gained some experience which enables us to play the role of prophet with a moderate degree of certainty. Much of the effect of passing the Society's Bill can probably be forecasted by merely recalling what took place here upon the passing of the Transvaal Act. In this light it appears probable that in the first flush of " Registration " conditions, and of the contributions thereunder demanded from practitioners, the Institute, the Society and other voluntary organizations will suffer some diminution of membership : in the case of the Society this may be regrettably heavy. We say regrettably, having regard to the present admirable efficiency of the Society for further good work, and having regard to the probability that it will soon afterwards be realized that Registration should have been considered as but merely the preliminary—or at best as a means—to many further necessary reforms. To obtain these further reforms no power to expend funds for initiating further legislation has been vested in the proposed "Council," but even if that power be added in the Bill, it is not sure that the Society's representatives will carry the vote of the "Council" for the purpose. An evil will arise in that, despite all that the Act may contain to the contrary, the "Council" will be regarded as the chief authority on all matters of practice, it being representative of the largest body of practitioners—inasmuch as members of the Royal Institute of British Architects and of the other voluntary bodies as well as all the "unattached" practitioners will be thereunder enrolled and represented. The evil to be feared in such event might be avoided by placing the representation on a democratic basis, *i.e.*, by making the Council entirely responsible to an electorate empowered to hold meetings, etc., for the purpose of expressing its views. The manner of election prescribed in the Bill will tend mostly to the appointment of men in comfortable practice—ornamental and accomplished gentlemen no doubt, but rarely satisfactory in our experience as representatives for the great majority, who are of course average practitioners. That the average practitioner gains certain experiences which the man with a big comfortable practice never knows of, and which make the former the more useful to his fellows as a representative, is by way of becoming a common-place with us in these parts! We are afraid that the "Council of Architectural Education and Registration of the United Kingdom," as proposed to be constituted and elected, will prove to be a final and insuperable obstacle to all further reform.

In support of our view that the Bill as drafted does not spell the last word in the reforms desirable and attainable, we may refer to the leading article in our January issue, where certain conditions obtaining in our own and other professions are contrasted. This proposed Registration measure is for men, not for angels, and architects would be more than human if—noting that the surplus funds are to be devoted to education—some objection does not arise to their being thus taxed to assist in further crowding their already overcrowded profession. Selfish, no doubt! but it would seem only fair to propose that for every sum devoted to such a sacrifice of self-interests, there should be at least an equal sum available towards furthering the advancement of the contributor. It is a law of existence! Except under such proviso the "annual renewal fee" can hardly be justified. Benefit to the taxpayer is a general principle of taxation. Where, as in this case, the "benefit" is only arguable on patriotic grounds, it would not be surprising if in Parliament a plea were put forth to appropriate the funds to the State, which latter is after all the chief paymaster for technical education.

We shall be sorry if our remarks are regarded as destructive criticism.* On the contrary it has been our desire, in detailing the subject for the information of our readers, to offer such comment as at this stage of the Society's Bill may be helpful to those entrusted with its further preparation for Parliament. We trust that the Society may meet with all the success which its many years of disinterested work so richly deserve, and that the measure in its adopted form may be one of lasting honour to its sponsors because of lasting benefit to the profession.

CRITICAL SYNOPSIS OF THE SOCIETY OF ARCHITECTS' DRAFT REGISTRATION BILL.

Briefly, the draft Bill provides for the establishment of a "Council of Architectural Education and Registration of the United Kingdom," consisting of nominees appointed by the Privy Council, by the Councils of the Royal Institute of British Architects, the Royal Institute of Architects of Ireland, and The Society of Architects, plus "direct representatives" elected per postal ballot by the registered practitioners. Other architectural institutes or educational bodies may, with the consent of the Privy Council, be later added to the constituent bodies represented on the Council; and it is further provided that any constituent body which, in the opinion of the Council, has "diminished in importance" may be deprived of representation. The Registration Fee will be three pounds at the date of passing the Act; and for those enrolling afterwards one pound plus examination fees, except in the case of Colonial and Foreign practitioners, who will have to pay "not exceeding five pounds"! The subscription takes the form of an "annual renewal fee" of one pound. South African members of the Royal Institute of British Architects, and of The Society of Architects will be interested to learn whether the preferential consideration given to their Home confrères in the Transvaal Act (and in the Draft Union Bill) are to be reciprocated. Clause 19, Sub-section 3 appears to forecast the official enrolment at the date of passing the Act of all members of both those bodies; but Clause 32 casts a doubt upon this, inasmuch as therefrom it appears that only members residing in the United Kingdom are intended to be included in any such initial registration, the inclusion of Colonial and Foreign members therein has clearly not been contemplated. Clause 27 adopts the very excellent clause embodied in our Draft Union Bill (but unfortunately omitted from the Transvaal Act) which debars unqualified persons from recovering fees; the difficulty in regard to certain necessary provisos being overcome by barring any prejudice to the rights of the professional members in several specified Institutions of Civil Engineers and Quantity Surveyors. The funds may be devoted to the routine expenditures connected with Registration and upon architectural education. The powers of the Council include the making of any bye-laws and, by implication, the determining of what is unprofessional conduct. This, it will be remembered, was one of the rocks on which recently, in our own Parliament, the Accountants' Bill was wrecked. It is peculiar that all reference to unprofessional conduct is confined to a short statement of the penalty therefor at the end of one of the Clauses (18). The procedure to be followed in cases of alleged unprofessional conduct is not specified, and the right of appeal from the decision of the Council therein is not provided for: Clause 37 providing for appeal to the Privy Council only in case of any matter which the Council has "failed" to do, not against what it has done, e.g., in removing a name from the Register! The scale of fees is not included in the Bill. Benevolence, Sick Benefit, Unemployment and Life Assurance—provided for in our Union Bill—do not appear, being doubtless covered by the operations of the Architects' "Approved Society," under Mr. Lloyd George's Insurance Act. No provision is made for general meetings of the registered practitioners—either for consultative or deliberative purposes, or for the purpose of electing the "direct representatives"—and none for devoting any portion of the surplus funds towards any public furtherance of their professional interests.

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*[One of the objects of the Society in publishing the draft Bill was to invite criticism, and the many useful suggestions made by the professional Journals in particular are of the greatest value to the promoters.—ED.]

Wages of Clerks of Works.

A deputation from the Incorporated Clerks of Works Association of Great Britain recently waited upon a Committee of the Council of The Society of Architects with a view to ventilating some of the questions affecting the interests of Clerks of Works, more particularly in regard to the rate of wages offered to them by Public Bodies.

The view put forward by the deputation was that the rate is much too small for the duties attached to the office and wholly inadequate to support any Clerk of Works as a representative of his Architect on the job with becoming efficiency and dignity. Some of the salaries which have been offered are not only below that of the average branch foreman, but even less than that of a qualified London journeyman.

It was stated that while the wages of building operatives all over the country have increased very much of recent years, the salaries of Clerks of Works have, at best, remained stationary, with a tendency towards reduction. It was urged that Public Bodies were the greatest sinners in this respect, and it was thought that by endeavouring to enlist the sympathy of architects, who were able to appreciate the point raised, a good deal might be done in getting Public Bodies to see the advantage of offering such a wage as would secure the best available services.

The deputation left feeling that the principle involved was one which commended itself to the representatives of the Society.

The Society and Public Appointments.

The Society has again been successful in getting candidature for an important public appointment, originally restricted to members of one Architectural institution, thrown open to other architects.

The Crown Agents for the Colonies have intimated to the Secretary that, in view of certain facts placed before them by the Society, they will be pleased to receive and consider applications from Members as well as from other suitable candidates, for the appointment of Superintending Architect for Nigeria.

The Society has always been successful in maintaining its claim for the recognition of its members by public bodies and others in matters of this kind. One of the chief advantages of membership is that of being able to accomplish by corporate action, things which it would be extremely difficult if not impossible to attain by individual effort only.

Arches over Streets.

Expert View of Regent Street Scheme.

Architecture as a commercial asset to London is one of the principles involved in the proposed Regent Street rebuilding scheme in connection with the widening of Argyll Place and the rebuilding of Messrs. Liberty & Co.'s premises. As stated recently in *The Standard*, official approval has been given for an arch to be erected across Kingly Street supporting a building of three storeys. This will enable a connected building to be erected from Foubert's Place along Regent Street and the whole length of Argyll Place to Great Marlborough Street. The omission of the archway building would, in the opinion of the Westminster City Council, affect the design prejudicially.

"Archways over narrow thoroughfares," said Mr. C. McArthur Butler, of The Society of Architects, to a *Standard* representative, "generally add to the attractiveness of the street, but, of course, various circumstances have to be taken account of. The public convenience as regards the traffic under the arch itself is of prime importance, and then, again, the question must be considered as to whether or not the erection of such an arch affects the light of adjoining buildings and the view of any picturesque building in the neighbourhood. Our architects of former days succeeded admirably in embodying the arch style of street building, and have thus given quite a picturesque and quaint effect to certain parts of the City. The old St. John's Gate, Clerkenwell, is one of the best surviving relics of this character. Smaller arches are to be found here and there in various streets.

"The Victoria Memorial Arch at the Mall entrance from Trafalgar Square vastly improves the general outlook, and if similar projects could be usefully carried out, especially in Central London, where the highest architectural attractiveness is desirable, then I think such projects should be encouraged wherever possible. The practical admission by the Westminster City Council that the street architecture effect is of equal importance with public utility in the construction of the arch at Kingly Street is, I feel sure, highly gratifying to architects."—*The Standard.*

The Problem of St. Paul's.

Mr. T. Stewart Inglis's Proposal.

It appears that our leading article of December 26th, in which we commented upon a scheme communicated by Mr. C. Hoyer Millar to the *Field*, has aroused interest in various quarters. We have received, among other correspondence relating to the subject, a letter from Mr. T. Stewart Inglis, M.S.A., who in 1907 contributed to a professional periodical some notes on kindred, though not identical, lines. The point in common between Mr. Inglis's suggestions and those of Mr. Millar is the underground containing wall, and those who may be interested in the subject will find Mr. Inglis's detailed proposals for the construction of this wall in the *Journal of The Society of Architects* for October and November, 1907. Mr. Inglis, however, is strongly at variance with the notion that the addition of water by artificial irrigation would be of value ; and he intended his proposed wall, not for the restriction of water thus mechanically introduced to the soil, but for the hindrance of "the natural percolation of water through the sand," which, he says, is "carrying away the finer particles." In fact, Mr. Inglis, whose first article on the subject apparently preceded the report of the Committee of Experts, thinks very lightly of that report, and ignores the committee's contention that the covering in of the soil by buildings and paved roads had contributed to the trouble by hindering the free percolation of moisture into the soil. It is this very phenomenon—the stoppage of natural surface irrigation —which Mr. Millar takes as the basis of his suggestions ; and it seems that his first letter to the *Times*, drawing attention to the greatly changed condition of the soil (owing to the modern pavements and other impervious coverings), must have appeared some weeks before the report of the Committee of Architects emphasized the same observation. Whatever may be the merits or demerits of Mr. Hoyer Millar's suggestions, we are glad to have laid them before architectural readers, and very willingly draw attention also to the claims of Mr. Stewart Inglis as the earlier proposer of the retaining, or, rather, restraining wall. Having communicated with Mr. Millar, we understand that he was, at the time of writing his article in the *Field*, entirely unacquainted with the writings of Mr. Inglis on the subject. The two proposals must, therefore, be regarded as independent in origin.—*The Builder.*

Mainly about Members.

We regret to announce the deaths of the following Members :—

Moses Johnson, of Wolverhampton, who had been a Member of the Society for twenty-six years, and in practice in Wolverhampton for upwards of thirty years.

The Rev. G. F. Burr, of Halesowen. The late Mr. Burr was one of the founder Members of the Society. He had been in Deacon's Orders for a good many years, and some years ago elected to be transferred to the list of retired members. His name was restored to the active list in 1911. By his death, the Society loses a member of that fast diminishing band who did so much to set the Society on a firm basis in its early days.

Victor Mitchell, of St. Peter's Chambers, Bournemouth. The late Member was articled to Mr. (afterwards Sir) James Lemon, F.R.I.B.A., of Southampton, and remained with him as assistant for a number of years. He then entered into partnership with Mr. Harry Hawker, M.S.A., of Bournemouth, and had been in architectural practice for upwards of twenty years. Mr. Mitchell joined the Society in 1894, and his death will be greatly regretted by all who knew him.

Joseph Earnshaw, Carlton House, Bridlington. The deceased Member, who was sixty-nine years of age, was a native of Heanor, Derbyshire, and came from Sheffield to Bridlington in 1869. He had, says *The Builder*, much to do with the development of Bridlington, and opened up the district served principally by Victoria Road, Wellington Road, and Trinity Road, and was engaged at the time of his death with the development of the portion of the Bessingby Estate, bordering on the borough on the north-west side. He designed a number of the town and district churches, and also St. Anne's Convalescent Home and the People's Palace. He was for several years a member of the old local Board. He joined the Society in 1886, and his death removes an old and valued Member.

Mr. A. Stockwell, is the architect for a new Restaurant which has been erected in Pilgrim Street, Newcastle, for Messrs. Higginbottom.

Two of the six architects selected by the Metropolitan Water Board to prepare Competitive plans for the new Central Offices are Mr. Burnet Brown and Mr. H. O. Ellis.

The Hemel Hempstead Rural District Council have instructed their Surveyor, Mr. T. H. Lightbody, to prepare a housing scheme of thirty-four cottages and road works at King's Langley.

Mr. Sidney French, of Cambridge, has been appointed Architect for "The Children's Home," and also for a new detached Building for the accommodation of Nurses, at the Cambridge Union.

Professor Henry Adams, M. Inst. C.E., Hon. Librarian and Chairman of the Board of Examiners of The Society of Architects, has been unanimously elected President of the Concrete Institute, for a term of two years from May next.

The Institute of Marine Engineers, hitherto located in Romford Road, Stratford, will move in due course to a new building, now in course of erection on Tower Hill, E. The architect for the new structure is Mr. Victor Wilkins, York Buildings, Adelphi. The cost of the building will be about £10,000.

Mr. T. Overbury, a Member of The Society of Architects Masonic Lodge, recently lectured before the brethren of the Stow Lodge, on "Church Doorways." The lecture which was illustrated by lantern slides was given at the request of the Lodge, thus setting a precedent which might be followed with advantage elsewhere in the interest of architecture.

The new premises of the Institution of Mining and Metallurgy, No. 1, Finsbury Circus, were formally opened by the Right Hon. the Lord Mayor recently. Considerable alterations and improvements have been made in the building, including redecoration throughout. The architect for the work was Mr. A. S. R. Ley, 214, Bishopsgate, E.C.

Extensive showrooms are being erected in Balham High Road for the South Metropolitan Gas Company. These rooms have been planned for the special display of all fittings and appliances connected with gas supply. Model rooms are to be provided for demonstration purposes. The architect is Mr. Victor Wilkins, York Buildings, Adelphi, W.C.

Mr. Thomas Walter Lawrence Emden, of Lancaster Place, Strand, W.C., and of Loxley, St. Margaret-at-Cliffe, Dover, a Past-President of The Society of Architects, for three years Mayor of Dover, and a former Mayor of Westminster, who died on December 3rd last, left £30,410 gross and £14,526 net. Testator bequeathed to Johanna Margaret Elkington, the silver salver presented to him by The Society of Architects.

Mr. G. A. Birkenhead, formerly of Cardiff, one of the founder members of the Society and a past member of the Council, is now resident in Vancouver, where he takes an active part in the affairs of the British Columbian Society of Architects. Soon after his arrival he was elected to the Council of the Vancouver Chapter, and is now a member of the Provincial Council, which includes in its area the whole province of British Columbia.

Architectural Competitions.

Members are requested not to take any part in the following Competitions without first ascertaining from the Secretary whether the conditions are approved by the Society:—Carcroft Wesleyan Chapel. Great Grimsby Constitutional Club.

The Membership.

Deceased.—JOSEPH EARNSHAW, Bridlington, *Member.*

Elected.—G. A. BRYAN, London; T. J. EVANS, Trowbridge; H. GOULBURN, Birmingham; F. HEARNE, Oldham; G. A. HILL, Haverfordwest; E. A. O. JAMIESON, Edinburgh; A. LAKEMAN, London; E. OSBOURN, Pietermaritzburg; W. D. PRATT, Nottingham; S. WALKER, Cockfield. *Members.*

Annual Dinner.

The Annual Dinner will be held on Tuesday, April 21st, at the Hotel Cecil, London, at 6.30 p.m.

The Chair will be occupied by the President: Mr. Percy B. Tubbs, F.R.I.B.A., and representatives of kindred Societies and of Public bodies will be the guests of the Society. It is hoped that the occasion will be marked by a representative gathering of members and their friends.

Applications for tickets, Members and Visitors, price 7*s* 6*d.* each (exclusive of Wine), should be made to the Secretary.

Ordinary Meeting.

The Fifth Ordinary Meeting of The Society of Architects for the Session 1913-14, will be held at 28, Bedford Square, W.C., on Thursday, April 16th, at 8 p.m.

Agenda :—

1. The President to take the Chair.
2. Minutes and matters arising.
3. Nominations and Announcements.
4. Election of Members.
5. Paper on "The Arbitration Clause," by MR. W. VALENTINE BALL, Barrister-at-Law.
   NOTE.—Advance copies of the paper may be obtained on application to the Secretary.

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The Society is not, as a body, responsible for the opinions expressed by individual authors and speakers.

The Institute and The Society of Architects.

This week we publish a further letter from Mr. McArthur Butler, in which the differences in regard to the policy of Registration between The Society of Architects and the Institute are set forth, from the former's point of view, with a particularity not calculated to assuage the bitterness of this unhappy quarrel.* The latter is the more deplorable in that the majority in both the Society and the Institute are, we have reason to believe, and despite Mr. Blomfield's letter, agreed upon the principle of ultimate Registration by Bill, and differ only on the method of obtaining it. Probably the Society will gain a good deal of sympathy from the rank and file, who are apt to prefer a dashing, if dangerous, policy to a tentative one; and a certain aloofness in the Institute's attitude from the first towards the younger body will considerably enhance this sympathy. The relative professional status of the Institute or the Society counts for very little in a case of this kind, and for this reason we doubt whether Mr. Blomfield's invitation to the provincial societies to come to heel, without explaining the grounds on which so drastic a step as active opposition to the Society's Bill is to be undertaken, was wise or politic. The one definite result that is likely to ensue from this dispute is the revival of the doubts and fears of the anti-registrationists. We shall certainly hear more of the folk who expect it to be a mark of distinction for an architect, if Registration comes along, to be unregistered.—*The Architects and Builders' Journal.*

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* See page 271 of this issue.—Ed.

Proceedings.

The Fifth Ordinary Meeting of The Society of Architects, for the Session 1913-14, was held at 28, Bedford Square, London, W.C., on Thursday, April 16th, 1914, at 8 p.m.

Mr. Percy B. Tubbs, F.R.I.B.A., President, having taken the Chair, it was resolved that the Minutes of the last Ordinary Meeting, as printed in the *Journal*, be confirmed and signed.

Eight nominations for Membership were announced, and a ballot was taken for the election of the following Candidates to Membership, and was declared to be unanimously in their favour.

Fitch-Jones. Basil Wallace,	P.W.D., Sierra Leone.
King, Frederick Cross,	74, Royal Avenue, Belfast.
King. George Grant,	
Parker. Arthur Larkin,	Oakham, Rutland.
Pritchard. Benjamin Lewis,	Castle Street, Brecon.

Mr. W. Valentine Ball, M.A., Barrister-at-Law, then read a paper on "The Arbitration Clause," and a discussion ensued in which the following took part:— A. Alban H. Scott, H. Freyberg, F.S.I., Ellis Marsland, A. F. O. Walbrook, S. T. T. James, Noel D. Sheffield and the Chairman. A hearty vote of thanks was accorded to the lecturer, and the proceedings terminated.

The Society's Examinations.

At the Examinations held last month the following satisfied the Examiners:—

Membership. Full Certificate.

William Henry Adams,	Council House, Romford.
Evan Daniel Jones	Bryn-yr-Enfys, New Road, Cwmllynfell.
Isaac Alexander Simpson	104, Bewsy Road, Warrington.
Gerald Montague Hedley	15a, Baker Street, W.
Gordon Arthur Joslin	192, Eglington Road, Plumstead.
William James Joynes	9, Spring Avenue, Weymouth.

Graduateship.

Frederick Juniper	2, Victoria Villas, Sanderbury Rd., Finsbury Park, N.

The Arbitration Clause.

By W. Valentine Ball, M.A., Barrister-at-Law.

Preliminary.

BEFORE presenting this paper to the Society I desire to make one or two preliminary observations with regard to the purpose I have in view. I do not wish to talk at large about arbitrarion, or to treat of its advantages or disadvantages. Suffice it to say that it has become and remains a necessary and important part of our legal procedure. Again, in dealing with the subject before me, I do not propose to treat the members as if they were listening to a new topic, discussed for the first time. I may assume that most of those who hear or read this paper know something of arbitration. Many will have acted as arbitrators, most will have been concerned with arbitration proceedings, while a large number are probably more familiar with certain aspects of the matter than I am. But I shall endeavour to refrain from hiding my meaning in the midst of a cloud of legal terms and phrases.

In dealing with arbitration from the point of view which is interesting to the architect, I hope to illustrate my points, not only by reference to cases reported in the *Law Reports*, but to certain other decisions. Some of these are not easily accessible. One has never before been published.

I shall not necessarily deal with arbitration in its every aspect. I only want to discuss with you certain practical points which appear to me to have given both lawyers and architects a good deal of difficulty during the past few years.

Clause in the R.I.B.A. Form.

I propose to consider the subject before me in relation to building contracts, and as most of those documents are in a common form, it will be convenient to consider the arbitration clause which is to be found in that form, namely, Clause 32 of the form approved by the Royal Institute of British Architects. I have no doubt that it was carefully drafted, with the assistance, probably, of eminent counsel. Nevertheless, it is not altogether easy to understand, and various interesting questions arise with regard to it. Here is the exact text of the Clause :—

> 32.—Provided always that in case any dispute or difference shall arise between the employer or the architect on his behalf and the contractor, either during the progress of the works or after the determination, abandonment, or breach of the contract,
>
> as to the construction of the contract, or
>
> as to any matter or thing arising thereunder (except as to the matters left to the sole discretion of the architect under Clauses 4, 9, 16, and 19, and the

> exercise by him under Clause 18 of the right to have any work opened up) or, as to the withholding by the architect of any certificate to which the contractor may claim to be entitled,
>
> then either party shall forthwith give to the other notice of such dispute or difference, and such dispute or difference shall be and is hereby referred to the arbitration and the final decision of A. B., or, in the event of his death or unwillingness or inability to act, of C. D., or, in the event of his death or unwillingness or inability to act, of a person to be appointed on the request of either party by the president for the time being of the Royal Institute of British Architects, and the award of such arbitrator shall be final and binding on the parties.
>
> Such reference, except on the question of certificate, shall not be opened until after the completion or alleged completion of the works, unless with the written consent of the employer or architect and the contractor.
>
> The arbitrator shall have power to open up, review, and revise any certificate, opinion, decision, requisition or notice, save in regard to the said matters expressly excepted above, and to determine all matters in dispute which shall be submitted to him, and of which notice shall have been given as aforesaid, in the same manner as if no such certificate, opinion, decision, requisition, or notice had been given.
>
> Upon every and any such reference the costs of and incidental to the reference and award respectively shall be in the discretion of the arbitrator, who may determine the amount thereof, or direct the same to be taxed as between solicitor and client, or as between party and party, and shall direct by whom, and to whom and in what manner the same shall be borne and paid.
>
> This submission shall be deemed to be a submission to arbitration within the meaning of the Arbitration Act, 1889.

Its general effect is as follows: It is that disputes which arise between builder and building owner are to be referred, not to a court of justice, but to an arbitrator named in the contract. In other words, the parties agree to be bound in certain matters by the decision of a self-appointed tribunal. That arbitrator is to have full power to settle all matters in dispute subject to this, that certain questions which arise in the course of the works are left to the decision of the architect.

MATTERS UPON WHICH THE OPINION OF THE ARCHITECT IS FINAL.

Let me draw attention without delay to the questions which are for the architect to decide. In general, they are matters upon which an immediate decision is essential; immediate in the sense that unless they are decided in one way or another, the works cannot proceed.

The following is a list of matters with regard to which the word of the architect is final. These are :—

(*a*) A decision of the architect with regard to discrepancies in the drawings, or between the drawings and the specification (Clause 4);

(*b*) The dismissal of any workman at the request of the architect (Clause 9).

(*c*) The removal of improper materials, and the removal and re-execution of work not in accordance with the drawings, specification, or instructions, provided the decision is given during the course of the works (Clause 16) ;

(*d*) The assignment and sub-letting of any portion of the works (Clause 19) ;

(*e*) A decision of the architect that part of the work shall be opened up for inspection (Clause 18).

MATTERS WHICH MAY HAVE TO BE DETERMINED BY THE ARBITRATORS.

The following are examples of questions which may have to be determined by an arbitrator:—

(*a*) Whether a particular piece of work is wholly outside the contract, and, if so, what is to be paid for it (see Clause 1) ;

(*b*) Whether a particular piece of work is to be reasonably implied from the drawings, etc. (see Clause 4) ;

(*c*) A decision that errors in setting out shall be amended at the cost of the employer (see Clause 6) ;

(*d*) Whether a defect arising within a stated period from completion was due to materials, or workmanship not in accordance with drawings, specifications, or instructions (see Clause 17) ;

(*e*) Whether work opened up was or was not executed in accordance with drawings, specifications, or instructions (see Clause 18) ;

(*f*) Whether an objection made by the contractor to a specialist was or was not reasonable (see Clause 20) ;

(*g*) Whether the works were injured by frost or other inclemency of the weather (see Clause 21) ;

(*h*) Whether the works could reasonably have been completed by a certain date (see Clause 24) ;

(*i*) Whether or not the contractor was entitled to an extension of time (as provided by Clause 25) ;

(*j*) Whether a notice given by the architect to proceed with the works in accordance with Clause 26 was reasonably or properly given (see Clause 26) ;

(*k*) The arbitrator may be asked to review a decision of the architect as to the value of works executed which justify the grant of a certificate, and the refusal of the architect to grant a certificate (see Clause 30).

WHETHER ARBITRATOR CAN DECIDE A POINT ARISING AFTER COMPLETION.

There is one point upon this clause which has not, so far as I know, been judicially considered ; yet it goes to its very root. Look at the first few words of the clause. You will observe that the arbitrator only has jurisdiction " in case any dispute or difference shall arise between the employer or the architect on his behalf, and the contractor, either *during the progress of the works*, or *after the determination, abandonment or breach of the contract.*" It is clear from this, that if a dispute arises while the works are in progress, *e.g.*, before the roof is on, the arbitrator has jurisdiction. It is also clear that his aid can be invoked in a case where the builder throws up the job, or the employer commits a breach of the contract by not allowing the builder to complete. The doubt remains: has the arbitrator jurisdiction after the job is finished in the ordinary way? You will notice that he has jurisdiction with respect to a dispute arising after the *determination* of the contract. Were this the only clause in the whole contract in which the word "determination" is used, I should take the view that it is equivalent to the word "end" or "completion." But if it means, or is intended to mean "*completion*," nothing would have been easier than for the draughtsman to use the word "*completion*." That word "completion" is, in fact, used in the contract. See for instance, Clause 17, which deals with defects, etc., appearing "within ...... months from the completion of the works." The fact is, however, that the word "determination," as used in this contract, is a term of art—that is to say, it is a word with a special meaning. Look, for instance, at Clause 31. That clause provides for what is to happen if the employer does not honour a certificate, or if the employer becomes bankrupt, and the trustee in bankruptcy does not satisfy the contractor that he can carry out the contract. In these cases, the contractor may *determine* the contract by notice in writing to the architect, and recover from the employer, payment for all work executed, and for any loss he may sustain upon any plant or material supplied or purchased or prepared for the purposes of the contract. "Determination" of the contract is therefore a different thing from "completion," and I venture to express the opinion that after final completion of works, the assistance of the arbitrator appointed under the contract, can no longer be invoked. For instance, suppose a defect appears after completion—such, for instance, as subsidence of a wall, or the dry rot of joists on the ground floor. The employer may complain that these defects were due to the fault of the builder, but if he wants to obtain redress he must do so by action af law. In this connection, it should be borne in mind that the final certificate of the architect is not con-conclusive as to the sufficiency of any work or materials to which it relates so as necessarily to relieve the contractor from liability.

It will be noticed that the reference is not to be opened until after the completion or alleged completion of the works, unless with the written consent of the parties. It is necessary to bear in mind the distinction between a reference itself and the cause of the reference, or the subject-matter of the dispute. The actual hearing of the arbitration is not to take place until after completion, but (as I have already indicated) the cause of the dispute must have arisen before that time.

It will be noticed that the arbitrator has power to review practically any decision or certificate of the architect. Thus it comes about that an architect may at some time or other be called upon to support his own certificate in the witness box. In these circumstances, the propriety of his seeing that his certificate can be fully supported on the ground of fairness will be obvious.

DAMAGES FOR DELAY WHEN TIME HAS BEEN EXTENDED.

There is a very important question arising on the Institute form to which I would like to refer. The architect has power to extend the time for completion in certain cases. Thus if delay is caused by a strike or bad weather, or extras, or in consequence of the contractor not having received in due time necessary instructions from the architect, the architect must make a fair and reasonable extension of time for completion in respect thereof. Mere extension of time, however, will not always be sufficient for the contractor. Delay may have the effect to throw the work over into the winter months, or it may otherwise increase cost by rendering it necessary for building operations to be carried out at a time when labour is scarce and expensive. May the contractor, in such circumstances, claim damages and seek to have the amount determined by arbitration?

This very question arose in a recent case, which is not reported but which came under my notice. The name of the case is *Trollope & Sons and Colls & Sons, Ltd.*, v. *W. M. G. Singer*, and it was heard by Mr. Justice Channell, on December 1st, 1913. The material facts were, that owing to delay in giving orders for works, the foreman was kept idle, and the builder sustained other damage. He sought to recover this in arbitration proceedings, when the employer took the point that there was no claim.

Mr. Justice Channell said (according to a copy of the shorthand note of his judgment) :—

> I have only to deal with certain matters which are set out in the award for the opinion of the Court. If he has included matters outside his jurisdiction it is for the divisional Court and not for me to take them into account. In substance an award in the form of a special case is equivalent to a request by the arbitrator to inform his mind upon certain points. I have to deal with the contentions put forward in paragraphs 18, 19, 20 and 21.

Paragraph 18 is as follows [His Lordship read this paragraph and continued]—

> " It is contended that the power to extend the time which is given in certain events by Clause 25 has effect to preclude a claim for damages if there is an extension of time. In other words, it is urged that an extension of time is to be deemed to satisfy all damage. Now, I cannot think that is what it means. The Clause specifies a number of events on the happening of which the architect is empowered to extend ; indeed he is not only empowered, but the clause says he shall, in those events, make a fair and reasonable extension of time for completion in respect thereof. I have to consider what they are. They fall into three categories. The first two are *force majeure* and exceptionally inclement weather. In respect of these the contractor might (unless they were specially provided for in the contract) say : ' It really is not my fault that I have not completed : the weather was bad.' He could make a grievance, but if he has contracted to do the work within a particular time the risk would be his according to our law. Although,

in that case he might ask for an extension he would not be entitled to it. Unless the contract contains some such Clause as 25 which provides for *force majeure*, the contractor would have to take the risk. The Clause then goes on to a different class of thing, 'by reason of authorized extras or additions.' Authorized extras and additions are, of course, extras authorized and contemplated by the contract. They do not amount to a breach of contract. It is no breach of contract by an employer to order something extra, and as a rule the contract shows that it is contemplated that there shall be extras, and the contract even provides a way of dealing with them and a way of ascertaining them. Nevertheless, an extra is a thing which, if done, and if so done as to make it impracticable to complete the work in the contract time, prevents the contractor being bound to complete within that time, and it is a matter which it is obviously reasonable to provide for by an extension of time."

"In *Jones* v. *St. John's College*, L.R. 6 Q.B., 115, the strict rights of the employer were preserved to him in respect of non-completion in the extended time. Then there is a third event or series of events in which this Clause comes into operation. That is a breach or breaches of contract by the employer. I do not distinguish between a breach by him and by his agent. If such breaches are committed, and if they have the consequence of preventing the contractor completing the contract work in the contract time, they do not exactly give him an extension, but they free him from the consequences of non-completion. They free him from penalties; and in that case there is a condition of things which it is desirable to provide for by giving the architect power to extend the time. It follows that there are three classes of cases in which it is desirable to give the architect power to extend the time. Why is that a reason to deprive the contractor of his remedy in damages? I can see no reason whatever for doing it. There is ample reason for the Clause, but there are no words in it which deprive the contractor of his right to damages. When time is extended, that affects the contractor not merely in the time he has to take in order to complete, but it also affects him pecuniarily in the way of damages. Why the employer should not pay damages I cannot see. This is a simple case where, by reason of the delay in giving orders to go on with the work at some particular place, certain work was left idle on the place, and the foreman or somebody on the spot who had to be paid was idle. An extension of time will prevent the contractor being liable for delay, but it will not put back into his pocket the damage which he has sustained by reason of having the men there and paying them. It seems to me he has a right to have those damages, and I must, therefore, decide against the employer."

I have given that extract from this judgment at length, because it is not recorded elsewhere, and may be of value to those members of the Society who ever have to construe Clause 25. The case of *Bush* v. *Whitehaven Trustees* (1888), 2 H.B.C., 118, may also be referred to in this connection.

Grounds for Objecting to an Arbitrator.

It does not follow that because a man is named as arbitrator in a contract he will necessarily be allowed to act, or that the parties will necessarily be compelled to submit their disputes to him. Circumstances may arise which render it inequitable that he should act. He may have become biassed by his position, as where for instance (to take an extreme case), he were to enter into partnership with one of the parties to the contract. I do not propose to consider all the various grounds upon which an arbitrator may be objected to, but there is one aspect of the matter which it is important to deal with.

A question has arisen in many recent cases whether a person employed and paid by one party to a contract can properly act as arbitrator in the settlement of disputes. This point is hardly germane to a discussion of Clause 32 of the R.I.B.A. Form, because it is there impliedly, if not expressly, declared that the arbitrator shall be an independent person. Thus (as we have already seen when perusing the Clause), disputes are referred "to the arbitration and the final decision of A. B. or, in the event of his death, or unwillingness or inability to act, of C. D., or in the event of his death or unwillingness or inability to act, of a person to be appointed on the request of either party by the President for the time being of the Royal Institute of British Architects, and the award of such arbitrator shall be final and binding on the parties." It is manifest that the architect, that is to say, the architect acting under the contract, could hardly be the arbitrator within the meaning of this Clause. If he were, he might be placed in the absurd and anomalous position of having to review his own decisions !

But many of you may have clients who are groaning under an arbitration clause. Thus, in contracts with local authorities it not infrequently happens that disputes are all referred to the county or borough surveyor, and the builder or contractor may very well take exception to his acting when the time comes. I need hardly point out that he cannot be objected to *merely* because he is in the employment of and is paid by one party.

It has long been settled law that this does not disqualify him. But the cases go further. They show that even where a man may possibly be biassed or has expressly declared himself on a matter he is not necessarily disqualified. In *Jackson* v. *Barry Railway Company* (1893, 1 Ch., 238) objection was taken to an engineer of a railway company acting in the capacity of arbitrator, because in a preliminary correspondence he had expressed a view adverse to the interests of the contractor. This fact did not induce the Court of Appeal to say that he was unfit to act. Lord Justice Bowen said : "To an adjudication in such a peculiar reference the engineer cannot be expected nor was it intended that he should come with a mind free from the human weakness of a preconceived opinion. The perfectly open judgment, the absence of all previously formed or pronounced views—which in an ordinary arbitrator are natural and to be looked for—neither party to the contract proposed to exact from the arbitrator of their choice. They knew well that he possibly or probably must be committed to the prior view of his own, and that he might not be impartial in the ordinary sense of the word. What they relied on was his professional honour, his practice, his intelligence, and the contractor certainly had a right to demand that whatever views the engineer might have formed he would be ready to listen to argument, and at the last moment to determine as fairly as he could, after all had been said and heard."

The doctrine above enunciated has been considerably modified by certain recent decisions. Thus, it has been held by various judges that a reference to the surveyor or architect of one party will not be enforced: (*a*) if the question to be decided is one which cannot be properly determined without the cross-examination of the surveyor (*Freeman* v. *Chester Rural District Council*, 1911, 1 K.B., 783); (*b*) if the dispute be as to the existence and terms of an agreement made between the surveyor (acting for the building owner) and the contractor (*Aird* v. *Bristol Corporation*, 1912, 28 T.L.R., 278); (*c*) if the question is whether the surveyor did or did not act unreasonably—*e.g.*, by making alterations and amendments in drawings, by delaying the delivery of drawings and materials, and by rejecting suitable material (*Blackwell* v. *Derby Corporation*, 1909, 75 J.P., 129); (*d*) if, although acting honestly, the surveyor has lost his independence by conferring with and accepting advice from one party to the contract (*Roberts* v. *Hickman*, 2 H.B.C., 3rd Supplement, p. 10); (*e*) The contractor will not be compelled to submit if the matter in issue is an unseemly personal dispute raising a vindictive feeling between the engineer and the contractor, and the engineer has so strongly expressed his view that it amounts to a prejudgment (*Nuttall* v. *Manchester Corporation*, 1893, 8 T.L.R., 513).

I think it may be said that in the above cases the Courts have gone as far as they are likely to go in the direction of relieving contractors from the arbitration Clause. I heard of the following attempt to extend the doctrine. A dispute was on foot between a contractor for the erection of a county hospital, and the local authority. The contractor had made a large claim for extras, and the architect had quoted the County Surveyor, who was named as arbitrator in the contract as having said that in allowing for extras, he had already taken the contractors claim into account. In these circumstances the contractor sought to have the reference to the surveyor set aside on the ground that the surveyor had already committed himself to a view of the matter. He failed in his attempt.

It may seem odd that a reference should in any case be ordered to proceed when one party takes serious objection to the arbitrator, but when considering this class of case it is well to remember that the parties have voluntarily bound themselves to submit disputes to a certain person. In the stress of competition your builder or contractor makes a tender and rushes blindly in without considering the arbitration or any other Clause. He has only himself to blame if, when disputes arise, the judge who is to consider them is not altogether to his liking.

Conduct of the Arbitrator.

Having said thus much about the arbitration clause, I should like to devote the rest of my time to the conduct of an arbitrator. Perhaps a few hints on this matter from the point of view of a lawyer may be found useful. The function of an arbitrator is similar to that of every judge. He is there to "hear and determine." *Audi alteram partem* is an injunction which he should keep constantly in mind. One side is all very well until you hear the other. The evidence which a witness gives in chief may be fairly convincing until you hear what he says in cross examination, The case for the plaintiff may sound unanswerable as presented by counsel in his opening speech; but it is essential for the arbitrator to keep an open mind. Let me remind you of what one of the greatest chancellors of all time said concerning the duty of a judge. "Judges," wrote Lord Bacon, in his essay entitled *Of judicature,* "ought to be more learned that witty, more reverend than plausible. and more advised than confident." And again, "Patience and gravity of hearing is an essential part of justice, and an overspeaking judge is no well-tuned cymbal. . . . . . The parts of a judge in hearing are four, to direct the evidence; to moderate length, repetition or impertinency of speech; to recapitulate, select, and collate the material points of that which hath been said; and to give the rule or sentence."

It would be almost impossible to state the whole duty of a judge in smaller compass.

There is much to be learned from watching the cross examination of the witnesses. Close attention to the demeanour and unconscious actions of the man in the box may help to elicit the truth. Anyone who ever attended the County Court at Whitechapel or Bloomsbury in the lifetime of Judge Bacon, must have been struck by the fact that while a witness was in the box the learned judge never took his eyes off him. Even when, in the days of the insanitary oath, the plaintiff or defendant was in the act of kissing the book, the watchful eye was always open. "The witness has not been sworn," the judge would say, "he only kissed his thumb!" It was by dint of this minute observation that justice could be done in a court where perjury was often regarded by litigants as quite a minor offence.

The power of being able to keep an open mind until all that can be said has been said, is also an integral part of the judicial faculty. A celebrated judge (who is still living) was once chaffed for having changed his mind during the course of an argument. His only comment was, "I rejoice to think that I am not so old as to be incapable of being convinced by argument."

The relative importance of the evidence given by various witnesses must of course be decided on the spot. It is well, however, to beware of the witness who is too glib, and of the expert witness who is obviously trying to fight the case of those on whose behalf he is appearing.

The architect sitting as arbitrator must of necessity use his own judgment in deciding technical matters. He has scarcely any need to rely on the evidence of experts, although it is very desirable that he should give due weight to their opinions. He must not, however, refuse to hear evidence and argument. I know of a case in which an engineer had been asked to settle a dispute about a motor car. After counsel for the plaintiff had addressed him, he asked to see the vehicle in question, which was brought to a convenient place outside the Court. Having seen the car, the arbitrator said: "I have made up my mind about this matter, and do not want to hear further evidence or argument." An award made in such circumstances could be set aside as not having been made by the arbitrator in the proper discharge of his duty.

CONSULTING A LAWYER.

Arbitration is sometimes resorted to as a means of adjusting disputes without invoking the assistance of the lawyer. There are many arbitration cases where legal aid can well be dispensed with; but the arbitrator should remember that he is entitled to consult his solicitor either for the purpose of drawing up his award or in connection with other matters arising during the proceedings. For instance, suppose a question arose during the hearing of a case as to whether a particular document was admissible in evidence, the arbitrator might take the opportunity during an adjournment of consulting his solicitor on the point. Again, for the purpose of drawing up his award, the arbitrator will do well to consult his solicitor. I had a case within my own personal experience, where the arbitrator, an eminent engineer, was accompanied by his solicitor throughout the proceedings. I should say however that he asked the consent of parties beforehand. There should, however, be a limit to the delegation of his duties by an arbitrator. The parties before him want his opinion, not that of a lawyer. I knew of one case where the arbitrator having procured a copy of the transcript of the shorthand note of the proceedings submitted the whole matter to a member of the Bar, to draw up his award for him. That was not, in my opinion, a proper discharge of his duty, although I do not know by what method it could be attacked, seeing that the award, as finally issued, was duly signed by the arbitrator, and otherwise in order.

POWER TO STATE A SPECIAL CASE.

It is well to remember that it is the right and privilege of every arbitrator to state his award in the form of a special case for the opinion of the Court. Thus, if a difficult question of law arises, the parties may be willing that the arbitrator shall decide it. In that event, he ought to decide it to the best of his ability. He must, however, if so requested by one or other of the parties, state his award in such a way that the Court will decide the point of law and allow the award to go in one event for the plaintiff and in the other for the defendant. It would also seem that if the arbitrator himself desires to have the assistance of the Court to decide a point of law, he may state his award in the form of a special case on his own mere motion.

COSTS.

The general rule in litigation being that the unsuccessful party must pay the costs, the principle may well be adopted by an architect sitting as arbitrator. *Væ victis* might almost be said to be a maxim of the law. But there is a rule of procedure with which arbitrators do not always appear to be familiar, and of which I should like to remind you. It is that if the defendant to an action pays into Court more than the amount recovered, he gets the costs incurred after the date of payment in. Again, if before action brought, the defendant has tendered enough or more than enough to cover the claim, and the tender has been refused, the defendant gets the whole costs of suit. So, when acting as arbitrator, you should take into account any firm offer that the defendant may have made before the proceedings were commenced. For instance, suppose a builder claims £1,000 for extras, and before the reference, the building owner makes a firm offer of or tenders £500. Having considered the case in all its bearings you come to the conclusion that £500 or even less is all that is due. You would then be fully justified in making the builder pay the whole cost of the proceedings.

FEES.

A brief word upon the sordid but not wholly unimportant question of fees. The arbitrator may fix his own fee if nothing is said about the matter when he undertakes the reference, but subject to this, that if he makes an exorbitant charge it can be recovered from him by action (*Fernley* v. *Branson*, 20, L.J.Q.B. 178). It is well, however, to give the parties some notion beforehand as to what the cost will be ; so much for the retainer, so much for a view of the *locus in quo*, and so much *per diem* while the hearing lasts.

As to the amount to be charged, I need not say much. Suffice it that fees run high, and properly so, for an arbitration takes up all the working hours of the day, and interferes considerably with the practice of a profession. That the Judges recognise this fact appears from the case of *Mason* v. *Lovatt*, 23, T.L.R. 486.

In that case a quantity surveyor had acted as arbitrator in a dispute between a firm of plumbers and a builder. The reference lasted for twenty-two days, and the arbitrator was subsequently employed for thirteen days in considering the case. He also took the advice of a solicitor and counsel on certain points of law. He charged £527 10*s*. 0*d*., which included ten guineas a day for thirty-five days, and £110 6*s*. 0*d*. for fees paid for legal advice. The district Registrar, disregarding the evidence of surveyors in good position, held that five guineas a day was sufficient and reduced the above amount by £283 0*s*. 6*d*. The Court of Appeal set this judgment aside. Dealing with the surveyor's remuneration, Lord Justice Moulton said, " The evidence is all one way, that the price charged by him was fair for a person belonging to his profession and occupying the position which he occupied in that profession. The District Registrar was not entitled to set that evidence aside. The true standard, in my opinion, of what should be paid in such a case is what a fair-minded man in the position of the referee would have required if a bargain had been freely made beforehand. In this case, there is no ground for supposing the referee has charged more than would have been required by a fair-minded man in a free bargain."

There is one satisfactory point about fees, and that is that the arbitrator should have but little difficulty in recovering them. He is entitled to keep back his award until the fees are paid. As a rule he saddles the party who is unsuccessful with payment of his fees, making them part of the costs.

A Few Don'ts.

I may perhaps conclude this paper with a few maxims likely to be of practical use.

Don't have lunch with one party only during the course of an arbitration.

Don't have any communication, written or verbal, with either party without the knowledge of the other.

Don't forget that patience is a branch of justice.

Don't blame the advocate for being too long-winded, it is a way he has ; and very often counsel gets into trouble with his client if he does not follow every point to the bitter end.

Don't forget to procure a Testament wherewith to swear the witnesses.

Don't talk more than is absolutely necessary.

Don't place much reliance upon the evidence of a witness who is too glib.

Don't forget that you have power to state a case on a point of law for the opinion of the Court.

Don't forget the important item of costs when making your award. Very often the costs incurred far exceed the sum in dispute.

Don't divulge to either party the effect of your award unless and until your fees are paid in full.

Discussion.

Mr. A. Alban H. Scott, m.r.san.inst., in proposing a vote of thanks to the lecturer, asked whether ordinary rain would fall within the category of " inclement " or " exceptionally inclement " weather referred to in Mr. Ball's paper. He understood that a builder could apply to the Courts or to the Arbitrator to ascertain what " inclement weather " really meant and get an extension of time. Mr. Ball had stated that an architect had no power to reject suitable material, but under Clause 16 of the R.I.B.A. form of Contract, it appeared that the Architect had full power to reject any material without any appeal on the part of the Contractor to the Arbitrator. He believed that if the Contractor considered the Architect's decision unreasonable the former could appeal to the arbitrator, although in the contract final decision was reserved to the Architect. Mr. Scott also asked whether the drawing up of the submission to the arbitrator was not of equal importance with the drafting of the award. On the question of the costs incurred in an appeal to arbitration, Mr. Scott asked whether an arbitrator had power to incur the cost of verbatim, shorthand notes being taken of the whole of the proceedings. The most important point for an architect to remember, was he thought, the fact that an arbitrator had the power to state a case without any request from either or both of the parties. Building owners were usually afraid of arbitration on account of the cost, and if it were known that an arbitrator could state a case on his own account, he did not see that arbitration helped very much, and they might just as well go to the Courts at once. In the event of neither of the parties taking up the award was it possible for the Arbitrator to sue either or both parties for his fees, which in some cases would be very considerable. If, after passing the Registrar, the Arbitrator had to go to the Court of Appeal to obtain his fees, who would pay the costs of the Law action ? In the case referred to by Mr. Ball (*Mason* v. *Lovatt*), involving a sum of a little over £500, the probable costs incurred in recovering the Arbitrator's fees might have amounted to some hundreds of pounds, and he wondered whether it would fall on both parties or depend upon the defence. Arbitrations under Building Contracts he thought might be divided into two classes, one in which sums of considerable magnitude were involved and which justified the heavy fees of Counsel and Solicitors, and another where the amount involved was under, say £400, when the costs incurred by Arbitration under the R.I.B.A. Clause would be very formidable. If one of the parties had any particular feeling in the matter, it appeared to be open to them to employ Solicitors and Counsel, and run up a heavy Bill of Costs. Would it not be advisable to extend the Clause or insert an alternative one so that where the amount in dispute did not exceed, say £400 or £500, the matter could be referred to what he would call the informal Arbitration of a Committee of three Architects or two Architects and two builders, before whom the parties concerned might appear in an ordinary consultation, and a decision given on the spot. He thought that if some such provision or machinery was inserted in Contracts, limiting as it were the value in dispute, it would very greatly help, as, at present, in a great many cases a client would rather pay £150 or £200 more than he considered equitable rather than go to Arbitration, while a builder was often prepared to drop a similar amount.

Mr. Ellis Marsland (Past Honorary Secretary), in seconding the vote of thanks, took exception to Mr. Ball's statement that one of the matters which might have to be determined by the Arbitrator was, whether errors in setting out should be amended at the cost of the employer. It was generally understood, he thought, that in ordinary contracts the Contractor had to set out the work, and if there was anything wrong he (the contractor), should bear the consequences. He recollected one case in which the walls of a chapel were built some eighteen inches out of line, and he questioned whether it would be a matter to go to an Arbitrator upon, for him to determine whether the contractor was entitled to an additional sum for the extra eighteen inches in the length of the trusses, etc. In his opinion, it was rather a matter which should be left to the discretion of the Architect. The word " determination " seemed to have caused the lecturer some difficulty. In the Institute contract it meant, he thought, both determination and completion. Determination in the event of the contractor throwing up the work, or determination in the event of the employer, through his Architect, being dissatisfied with the work or the rate of progress of the contractor. There were, however, two meanings to the word, summary determination and determination by a proper completion of the building. With regard to Arbitrations generally, he thought there was a good deal in the Institute form which might be dispensed with. It had been tinkered at many times, both from the Architect's and from the builder's points of view, and the present form was, he thought, a compromise which he believed satisfied neither party. He was not a believer in Arbitration, except in small matters. Arbitrations generally extended over a considerable period, and were very expensive. Arbitrators had to be paid, whereas they had judges and official referees paid by the State, who, he thought, with the assistance of Counsel and experts on both sides, could determine the questions at issue without incurring fees and other expenses which the Arbitrator was allowed to charge. The Lecturer appeared to think that the Arbitrator's lot was quite a happy one, but he knew of a case which occupied a very considerable amount of time, and at the end neither party would take up the award, and the unfortunate Arbitrator was still awaiting his fees.

MR. HERBERT FREYBERG, F.S.I. (Member), in supporting the vote of thanks, said the Lecturer had deepened his own conviction of the uncertainty of Arbitration. He frequently gave evidence, and he had come to the conclusion that in ordinary cases the interests of litigiously inclined people were better served by the Law Courts than by Arbitration under the Act of 1889. Possibly he had been unfortunate, but in some cases it seemed that the expenses of the Arbitration were out of all proportion to the matter in dispute. In a case before a Master or an Official Referee, one was often released after a day or two, whereas one was sometimes detained before an Arbitrator on and off for something like eighteen or twenty days. In addition to the expert witnesses, the Arbitrator himself had to be paid by no means a small sum, and the result was often unsatisfactory to all parties. The Act of 1889 was, he believed, welcomed by two classes of people, the Lawyers, who had reason to rejoice, and those of the British public who thought that they were going to obtain their law cheaply. He, personally, had always been careful in the past not to embark his client's affairs on any path of Arbitration, and after hearing Mr. Ball's remarks his vigilence in that respect would be redoubled. He thought Architects would agree with him in saying that finishing up a contract and having to submit to Arbitration was not a satisfactory termination, and both builder and client when they had seen the end of it were generally inclined to agree with the Architect. After all, their duty was, not to act as Lawyers, and if their legal knowledge was sufficient to keep their clients out of trouble, he thought they knew as much as they were called upon to know.

Mr. A. F. O. Walbrook (Solicitor), stated that he was not an admirer of Arbitration, which he thought was a most cumbersome way of deciding disputes, although there were certain classes of cases where Arbitration, properly applied, might be extremely useful, such as a dispute between an Architect and builder where the opinion of another Architect without any legal argument would be inexpensive and far more satisfactory. Arbitrations over matters involving hundreds of pounds where expert evidence was called and legal advice required, often resulted in unsatisfactory decisions. The Arbitration Clause should be drawn so that it was not open to ambiguity, and in such a way as to cover all disputes between the parties. Another point to be considered was, whether the Arbitrator should be a man of technical or legal knowledge. The class of Arbitrator whom he personally found most successful was the man who had some legal experience and some experience of the particular class of matter in dispute. When a lay Arbitrator, who might be an eminent man in his own profession, was called upon to deal with legal matters, and evidence was brought before him, witnesses examined and so forth, there was sometimes a risk that evidence would be allowed which was strictly inadmissable, a course which might operate very unfairly to the side which tendered evidence in proper form. If Arbitration was decided on he emphasized the desirability of preparing their case beforehand; to definitely settle what they were going to Arbitrate about, stating their claim and their defence and what the particular points were upon which they wanted a decision. It was not absolutely necessary, but points of claim and defence he had personally found extremely useful. An Arbitrator employing a Solicitor should bear in mind that the Solicitor's costs could be taxed, and the Arbitrator could be called upon to state how much of his charges represented his own fees, and how much those of the Solicitor. If he had consulted the Solicitor unnecessarily he might be called upon to pay the latter's charges out of his own remuneration. An Arbitrator had not power to sue for his fees, and if his award was not taken up he had to bear the loss. It was, however, quite open to him to stipulate that a deposit for fees should be made before he entered upon the Arbitration, and obviously he should not disclose the nature of the award until his decision had been given.

Mr. Noel D. Sheffield (Member of Council), said his own opinion was that builders when signing a contract concerned themselves with nothing therein except those clauses under which they were to be paid for their work. He cited an interesting case in which a building owner had taken possession of a house before the builder had completed the work, although his contract time had been exceeded. Before the job was actually completed a very large elm tree suddenly collapsed causing considerable damage to the house, and the question arose as to who was liable for the damage. Had the building owner by taking possession of the house cancelled the contract, although the men were still at work ? His client was very much disposed to fight the case, feeling that the builder ought to make good the damage out of his own pocket, but eventually the building owner agreed to meet the extra cost. It would, however, be interesting to know what the legal opinion was in the matter.

Mr. S. T. T. James (Member), suggested that the Lecturer was leading them astray in his reference to the practice of Judge Bacon studying the faces of people before him and which to some extent influenced his decision. The speaker cited instances of the great danger of studying faces as a guide to a decision in Arbitration matters.

The President then put the vote of thanks to the meeting, and it was carried with acclamation.

Mr. W. Valentine Ball, m.a. (Barrister at Law), after expressing his thanks for the reception accorded his paper said, in reference to Mr. Alban H. Scott's enquiry that the words " exceptionally inclement weather " were found in Clause 25 of the R.I.B.A. form, so that it was obviously something more than ordinary bad weather which was contemplated. Ordinary rain, he thought, would come under that heading if it were continuous and made procedure with the work impossible. He cordially agreed with Mr. Scott that the drawing up of the submission to the Arbitrator was of great importance, and that care should be taken to see that the issue between the parties was clearly defined, by points of claim and point of defence, so that there was no doubt in the minds of anybody as to what the Arbitrator had to do and what he was there to decide. It was perfectly clear that a legal Arbitrator could not sue for his fees, but he believed there were cases in certain forms of mercantile disputes where it had been held that the fact that the Merchant had consented to decide the question by Arbitration raised an implied contract to pay the Arbitrator a reasonable remuneration. The best plan of course was for the Arbitrator to get his fees in advance, but there was a difficulty in settling the amount inasmuch it was impossible to say how long the Arbitration would last. With regard to Mr. Scott's enquiry as to which side would have to bear the cost of a Law action, such as that of *Mason* v. *Lovatt*, he had not the report before him, but having regard to the result of the case, he thought it would certainly not be the Arbitrator who would have to bear it, but the person who had been unsuccessful in the Arbitration. With regard to

Mr. Scott's suggestion for informal Arbitration, he had no doubt that there were many cases between Architects and builders which might be easily settled by an appeal to such a body, but he saw a difficulty in getting a client to agree to abide by the decision of such a tribunal. Laymen knew nothing of the customs or etiquette of those two great professions, and building disputes very often involved consideration of an enormous number of items, and he thought that an informal Arbitration such as that suggested would in practice prove unsatisfactory.

Mr. Marsland had referred to the finality or otherwise of an Architect's decision in regard to the setting out of the work. It seemed quite clear from the wording of Clause 6, and that of the Arbitration Clause that the decision of the Architect as to whether the builder should pay for inaccuracies in setting out was subject to review. With regard to the meaning of the word " determination " it was a well-known rule of law that where a particular word was used in a contract it must be interpreted according to the meaning attached to it therein. In other words, one could not place two interpretations upon the same word which occurred in two different clauses. In clause 31, it was given a specific meaning, and in his opinion, it was the only meaning which could be attached to it.

Mr. Marsland had also questioned whether Arbitration was the most satisfactory method of deciding disputes. He had been very careful throughout his paper to express no opinion on that point, but he confessed that it had often occurred to him that the parties who consented to the Arbitration Clause very often overlooked the fact that whatever legal charges were incurred in the course of the enquiry one or other of them would eventually have to pay; whereas, if they preferred to enter into litigation the tribunal, at any rate, was paid by the State, and in some cases it became a matter for careful consideration.

Mr. Freyberg was of opinion that litigation was better than Arbitration, and he (Mr. Ball), felt inclined to agree with him, for, after all, if they went before a Master in Chambers or an Official Referee or a Judge, the dispute was dealt with by one who was accustomed to hearing cases and to deciding on the spot what points were relevant and otherwise, and it was in his power to shorten the proceedings to a very material degree. In that sense Mr. Ball thought litigation had a great advantage over Arbitration, although in solely technical disputes the knowledge of the Arbitrator was a great advantage and might possibly tend to save considerable time and expense in the matter of expert witnesses. The Society was to be congratulated on having obtained the views of Mr. Walbrook, who had acted as Solicitor in many Arbitrations, and he agreed with his remarks relating to the desirability of the Arbitrator insisting upon the claims being made in writing and being clearly defined.

With regard to Mr. Sheffield's enquiry as to the legal liability of the building owner or builder in the case of damage to a house through the sudden collapse of a tree in the vicinity, he could not say off-hand how far the fact that the employer had taken possession of the house affected the liability of the owner, but if he could be provided with a copy of the contract under which the house was erected, he might be able to give a definite opinion. If the contract was in the R.I.B.A. form, he thought it would be the duty of the builder to take all such risks until the Architect had granted the final Certificate. It might be said that it was *force majeure* to cause a tree to fall on the house, but speaking off-hand it was a builder's risk. As to what he had said regarding the demeanour of witnesses, notwithstanding Mr. James' remarks, he adhered to his opinion.

The Use of Sculpture.

Have we a knowledge of how to use sculpture ? In the opinion of Mr. J. M. W. Halley, of the Chelsea Arts Club, we have not. Sculpture, he declares, is only kept alive by architecture and a few public-spirited people who care for it.

This view was endorsed recently to a *Standard* representative by Mr. C. McArthur Butler, the Secretary of The Society of Architects. One of the most appalling blunders, he said, was the memorial to Queen Victoria, which conflicts absolutely with the architectural composition of the Mall. " Sculpture, like a picture," said Mr. Butler, " depends upon its surroundings, and simply to produce a monument and place it in a position without any consideration for its environment does not represent composition in any way at all. The difficulties are greater in London than they are abroad, because the practical tradition of the race prevents us from constructing roadways the same as Baron Haussmann did in Paris. There the authorities will pull down buildings in order to get wonderful vistas and effects, and, after all, sculpture is only the trimming.

" The fact is, we are too practical a race. We are all pounds, shillings, and pence. We are not broad enough or big enough in our views. We can build battleships and bridges and make railways; we are great colonists, but we do not understand statuary."

Mr. Butler's opinion was endorsed by a well-known practising architect, who thought, however, that a step in the right direction had been taken recently by the establishment of a Beaux Arts Atelier in the western district of London, where architectural composition was made a special study. There young men assembled in the evening for the purpose of working various schemes, such as sanatoria, cavalry barracks, etc.—*The Standard.*

Annual Dinner.

THE Thirtieth Annual Dinner of the Society was held on Tuesday, April 21st, at the Hotel Cecil. The Chair was occupied by the President: Mr. Percy B. Tubbs, F.R.I.B.A., and the following representatives of kindred Societies, Government Departments, and other Public bodies were the guests of the Society:—

The Rt. Hon. Lord Saye and Sele; The Rt. Hon. Herbert L. Samuel, P.C., M.P. (President of the Local Government Board); Sir Lawrence Gomme, J.P. (Clerk, L.C.C.); Col. Sir Thos. H. Holdich, R.E., K.C.M.G. (Chairman, Royal Society of Arts); Sir Henry Tanner, C.B., I.S.O., F.R.I.B.A. (Chairman, Royal Sanitary Institute); Mr. Justice Bailhache; His Honour Judge Atherley-Jones, K.C.; Mr. W. Valentine Ball, M.A., Barrister-at-Law; Mr. Arthur E. Brown, B.Sc.; Mr. H. E. A. Cotton (Deputy-Chairman, L.C.C.); Mr. A. W. S. Cross, M.A., V.P.R.I.B.A.; Mr. A. O. Goodrich, J.P. (Vice-Chairman, L.C.C.); Mr. George Hubbard, F.S.A., V.P.R.I.B.A.; Mr. A. A. Hudson, K.C. (President, Tribunal of Appeal); Mr. A. R. Jemmett, F.R.I.B.A.; Mr. H. V. Lanchester, V.P.R.I.B.A.; Mr. R. Goulburn Lovell, A.R.I.B.A. (Hon. Secretary, Beaux Arts Committee); Mr. Chris. A. Markham, F.S.A.; Mr. F. G. Rice (President, Institute of Builders); Mr. H. C. H. Shenton (President, Society of Engineers); Mr. W. S. Wallis (President, London Master Builders' Association); Mr. E. P. Wells, J.P. (President, Concrete Institute); Mr. W. Edward Woolley (President, The Surveyors' Institution); Mr. F. R. Yerbury (Secretary, A.A.).

Amongst the members of the Society and visitors present were:—

Mr. G. Adams, Mr. H. Aston, Mr. A. A. Atkins, Mr. Chas. H. Baker, Mr. Balmain, Mr. R. Geo. Bare (Past Hon. Librarian); Mr. E. L. Bates, Mr. Wm. Henry Battle, F.R.C.S.; Mr. Ernest S. Beal, Mr. A. D. Bell, Mr. Kenneth S. Broad, A.R.I.B.A.; Mr. Mark Bromet, Mr. F. Malcolm Burr, Mr. C. McArthur Butler, F.C.I.S. (Secretary); Mr. B. D. Cancellor (Past Member of Council, Winchester); Mr. Harold Cane, Mr. W. Challoner, Mr. Chris. Chart, F.S.I.; Mr. Max Clarke, F.R.I.B.A.; Mr. W. Lee Clarke, Mr. Harry Clayton (Johannesburg); Mr. Ernest C. P. Coleman, Mr. H. Colwell, Mr. H. T. Cover, Mr. Frederick T. Cross, Mr. F. C. Dart, Major R. Cecil Davies, V.D. (Member of Council, Chester); Mr. S. Everard Davies, Mr. Chas. Deards, Mr. Walter Dewes, Mr. William Downs, Mr. Albert F. Drew, Mr. Edward Earle, Mr. W. Egerton, Mr. E. W. Elliott, Mr. Herbert O. Ellis, Mr. P. H. Edmondson, Mr. J. G. Ensor, Mr. T. C. Evans, Mr. T. Jay Evans, Mr. W. Fenn, Mr. Walter S. Field, Mr. H. Phillips Fletcher, F.R.I.B.A.; Mr. Arthur Franklin, F.S.I.; Mr. Herbert Freyberg, F.S.I.; Mr. W. F. Fryer, Mr. J. G. Carew-Gibson, Mr. Percy Gleed, Mr. George W. Glenny, Mr. Alex. Gordon, F.S.I.; Rev. C. A. Griffin, M.A.; Mr. Douglas Harris, Q.S.A.; Mr. H. Maltby Harris, Mr. C. F. Hart, Mr. W. G. Hart, Mr. H. Hitchcock, Mr. Wm. Hoe, Mr. J. Douglas Hunter, Mr. R. A. Jack (Member of Council); Mr. Chas. E. Jackson (Hon. Treasurer); Mr. Samuel T. T. James, F.R.G.S.; Mr. J. Jellis, Mr. J. Gwyn P. Jepps, Mr. H. I. Johnson, Mr. W. Jones, Mr. J. A. King, Mr. J. A. Gill-Knight, A.R.I.B.A.; Mr. D. A. Langdon, Mr. H. Lavington, Mr. Alex. Leoni, Col. F. S. Leslie, R.E. (Past Vice-President, Hon. Secretary); Mr. Sivori Levey, Mr. H. London, Mr. R. G. Lovell, A.R.I.B.A.; Mr. G. F. Lucas, Mr. Edwin March, Mr. S. Marsland, Mr. Herbert W. Matthews (Member of Council); Mr. Chas. Mason, Mr. A. Y. Mayell, J.P., M.R.SAN.INST.; Mr. F. Memory, Major E. C. P. Monson, F.R.I.B.A., F.S.I. (Vice-President);

Mr. E. L. Moore, F.S.I.; Mr. W. Morris, Mr. Oswald Moser, Mr. W. F. G. Nicholls, Mr. J. R. Nolon, Major H. Oliver, T.D.; Mr. Bernard C. Page, Mr. George H. Paine (Member of Council); Mr. Edward J. Partridge, F.S.I. (Past Hon. Treasurer); Mr. Herbert Peacocke, Mr. Wm. Petch, Mr. F. R. Potter, Mr. J. Henry Pitt, F.S.I.; Mr. H. Prance, Mr. Edward Procter, Mr. John Ramsden, Mr. F. Reddrop, Mr. C. R. Reynolds, Mr. W. H. E. Roberts, Mr. C. Rowley, Mr. J. W. Rowley, Mr. Edwin J. Sadgrove, F.R.I.B.A. (Past Hon. Treasurer); Mr. M. T. Saunders, Mr. A. Alban H. Scott, M.R.SAN.INST. (Member of Council); Mr. J. W. Shaft, Mr. Noel D. Sheffield (Member of Council); Mr. H. Shepherd, A.R.I.B.A.; Mr. H. E. Sherwin, Mr. Henry Smith, Mr. H. Spark, Mr. J. Spurling, J.P.; Mr. George Stapley, Mr. L. Sylvester Sullivan, A.R.I.B.A.; Mr. F. Sykes; Mr. H. Guicharde Todd, F.S.A. (Scot.); Mr. H. Tripe, Mr. Grahame B. Tubbs, Mr. H. T. Tubbs, J.P.; Mr. Leonard Tubbs, M.A.; Mr. B. R. Tucker, M.R.SAN.INST. (Member of Council); Mr. G. A. P. Waite, Mr. J. M. Wallace, Mr. A. Wallis, Mr. Thos. Wallis (Member of Council); Mr. William E. Wanmer (Assistant Secretary); Mr. C. Watkins, Mr. M. Webber, Mr. W. H. Webber, F.S.I.; Mr. J. F. Wetherell, Mr. H. Wheater, Mr. Walter C. Williams, Mr. Blankley H. Willis, Mr. B. Willson, Mr. A. T. G. Woods, Mr. Lionel Wood, Mr. Percy W. Woods, Mr. T. Woolnough, Mr. E. W. Cooke Yarborough, Mr. F. C. Moscrop Young.

The loyal toasts having been proposed by the PRESIDENT, and duly honoured, MR. E. C. P. MONSON, F.R.I.B.A., F.S.I. (Vice-President), proposed the toast of "The Houses of Parliament," coupled with the names of the Rt. Hon. Lord Saye and Sele, and the Rt. Hon. Herbert L. Samuel, M.P., President of the Local Government Board. He said that architects as architects took little interest in politics, but referred to the services of Lord Seye and Sele, in connection with the First Atelier of Architecture, founded by the Beaux Arts Committee, of which he was the energetic Chairman, and also in connection with the Society's Registration Bill, which he had promised to pilot through the Upper House at the proper time. Mr. Monson also referred to the Housing and Town Planning Act, and suggested that if it were possible to cheapen the cost of preparation of Town Planning schemes, more good would result. The owners of land should not have the power which they at present possessed, and it should be for the local authority who knew exactly what was required to have a free hand in the placing of the roads, etc., irrespective of whether the landlord was agreeable or otherwise. Landlords generally considered their own pockets first, without any thought for the amenities of the district. Referring again to the Society's Registration Bill, Mr. Monson suggested that the Government should adopt the Measure, and by making the Bill an Act, prevent those undesirable people who at present styled themselves "Architects" among other callings, from posing as members of the profession. The profession of an Architect was an honourable one, and all Architects in the room would join with him in looking forward to the day when it would be a closed and educated profession, and every member of it thoroughly qualified. The Society's Bill was being promoted not so much in the interests of the Society as in those of the community at large.

THE RIGHT HON. LORD SAYE AND SELE having replied for the House of Lords in a humourous speech, the RIGHT HON. HERBERT SAMUEL, M.P., in responding for the House of Commons, said they were told that architects as architects had no politics, and that was no doubt true; but as individuals belonging to a class which pays super-tax, he feared they might be said to have an inclination one way. So far as the Bill they were interested in was concerned, when it came before Parliament it would certainly receive the careful consideration of His Majesty's Government. There was a close connection between the work in which the Local Government Board was engaged and the profession to which they belonged. The action of local authorities might have a great deal of influence for good or for ill on the development of our cities, and the action of the Local Government Board might have a great influence on the efforts of the local authorities, and architects were vitally concerned in the improvement and beautification of our towns, and he could imagine no greater pleasure than for an architect to sit down and design an ideal city, unless it were the designing of a £500 shop. The ideal city might be reproduced in an illustrated paper, but as a rule the design went no further, whereas that of the shop did. If they tried to imagine what the town should be like in which 10,000 or 100,000 members of a civilized nation should live and bring up children, they would imagine it with spacious avenues, broad squares, dignified public buildings, and with parks and gardens—in fact, something quite different from any of our great industrial towns, London had, indeed, developed into a metropolis which in course of time might be a splendid city, but most of our industrial towns were far below any standard which could be accepted as even tolerable, and below even the standard of such towns in Germany, and still more below that which obtained in the newer countries of the world across the Atlantic. The task before this generation and the next was the rebuilding of our great industrial towns, and to secure that the blame which we rightly threw upon our grandfathers for not foreseeing the needs of to-day, should not be thrown upon us in the future. The Housing and Town Planning Act was already making provision to a very large extent for the accomplishment of that task. His Department already had cognisance of no fewer than 220 town-planning schemes in various stages of completion, proposed by nearly 200 separate local authorities, and they had definite applications for the sanction of seventy-eight of these schemes, which covered an area of no fewer than 116,000 acres of land.

One question in which he was especially interested was that of the pollution of the air by smoke. If the atmosphere of the towns was clear and limpid they would not only have a happier and more cheerful population, but they would afford architecture a better chance. He was not convinced that the law had done all that it could do to bring about a better state of things, or that the objections of some manufacturers that it was impossible to secure the consumption of smoke by their furnaces were sound. He had taken the first step to better things by the appointment of a strong Committee, representing all the interests concerned, on which he was glad to say Sir Aston Webb had consented to serve as representing the architectural profession. He hoped they would before long be able to make representations which would enable the law to put an end to the grievance.

It had been said that a man in choosing a career should beware of devoting himself to work which died with the doer, and in this respect architects were a fortunate class. No work had such permanence as the work of the architect, unless it was perhaps the work of a successful philosopher or poet, which lived longer than stone or marble.

Architecture represented to future generations the characteristics of the age. If they had the glory and permanence of their work they also had the responsibility attached to it, and he was glad to think that the present school of British Architecture stood so much higher than it did, say in the early or mid-Victorian times.

Mr. Justice Bailhache then proposed the toast of the evening "The Society of Architects." In the course of his remarks he said that architects had been divided, not by him, into two classes—*i.e.*, the class that could design very beautiful buildings, and a totally different class that could design buildings suitable for the purposes for which they were intended. The architectural profession had great advantages over the legal profession, for architects were productive and added to the sum total of the wealth of the world—a thing which he did not think barristers could claim to do.

There was a time when Architects were something more than producers, when a Michael Angelo, having designed a glorious building, would go forth with hammer and chisel and carve the statuary to adorn it. He would like to see the time come again when architects would not only design a magnificent building, but be able to teach every trade engaged in its erection. They, however, now lived in faster times and it was perhaps hoping for the impossible.

The Town Planning Act was only in its infancy, but a very good beginning had been made, and in the work Architects could play a part of invaluable utility. He was glad to think that as a profession Architects had given the greatest assistance to the work of the Local Government Board, and as they understood the importance of beauty and environment in the development of their towns, of which, unfortunately, the mass of public opinion were ignorant, he suggested that every individual architect should do all they could to enlighten local authorities and other interested parties in such matters. Any one man who was keen about these things could accomplish a great deal in his own locality by making representations to the local authorities, writing to the local press, and in bringing influence to bear here and there in order to overcome the difficulties inevitable in all schemes of development.

Architects were to be congratulated on the permanent character of their work, for there was nothing made by man which was more permanent than the works of architecture, unless indeed it be great thoughts and words embalmed in literature, or, oddly enough, nursery rhymes, and he congratulated them on speaking to a larger audience than most people, for their works were in public, and if they were great works people came from all parts to look at them, though very likely they had no idea who the particular architect might be. But what did that matter, for an architect lived in his work and would rather have that praised than himself. The great efforts of the Bar were made in the presence of a few and they were ephemeral, but the works of architects remained, and they appealed to great audiences. Architects also did judicial work, for they sat in judgment under the arbitration clause in building contracts. No judge sat in judgment on himself, but the architect did, and it had always been a matter of wonder to him that architects and engineers were judges in their own cases, and that spoke volumes for them. He was glad to hear they were promoting a Bill for the Registration of Architects and for the regulation of the profession, and they had his fullest sympathy. With the toast he coupled the name of the President, whom he had known for many years.

THE PRESIDENT, Mr. Percy B. Tubbs, F.R.I.B.A., in replying to the toast of the evening, said that the thirtieth year of the Society's existence found it in a very sound and strong position for carrying on its work, in the direction of the objects for which it was founded.

The Society had always prominently identified itself with architectural education in the belief that the practice of architecture demanded that the practitioner should first of all have received a liberal education, and have been properly trained in the many subjects embraced under modern conditions of practice before he is permitted to hold himself out to the public as a person capable of practicing the art.

The Society's investigation into the present system of architectural training in design in Britain had resulted in the formation of the Beaux Arts Committee to promote improved methods of teaching design, by the establishment of Architectural Ateliers, carried on under the direction of Diplômé Architects of the Ecole des Beaux Arts. The first of these Ateliers in London had been established more than a year ago, and had achieved results which had justified its promoters in undertaking the responsibility. There was evidence that there were other architectural educationists and bodies who were coming round to the same point of view in regard to the method to be adopted in teaching design, and it was rumoured that rival Ateliers were to be established on similar lines in London, and possibly in other parts of the United Kingdom. This was all to the good, as it would stimulate a healthy rivalry. He was convinced that the Atelier method of working was the best one, and that very soon not only architects but painters and sculptors would be working on similar lines, and that all these Ateliers would be grouped around a central establishment under the control of a Ministry of Fine Arts, a proposal which was already well within the field of practical politics.

The question then arose as to the position of the fully equipped architect in relation to that section of the public having dealings with architects, and how the latter could distinguish qualified from unqualified practitioners. It was a popular fallacy that everyone calling himself an architect had been properly educated and trained for that profession. That, of course, was not necessarily the case, and there were numbers of persons who used the title " architect " without the least qualification, and who thereby imposed upon the public, and frequently brought the profession into disrepute. It was to stop this kind of thing, and to enable the public to distinguish between a qualified and unqualified architect, that The Society of Architects advocated Statutory Registration ; they had in the past promoted Bills in Parliament to that end, and at the present moment had a Registration Bill on the stocks ready to introduce into Parliament at the first favourable opportunity. The present occasion was not one on which he wished to introduce any contentious matter ; they were gathered together for quite another purpose, but he felt that the Members would expect him to make some statement regarding the Society's Registration policy, and he could do that at once by stating that the policy of the Society in this respect had never changed during the whole thirty years of its existence, and it was not likely to do so. They were pledged to accomplish Statutory Registration, and it was their intention to continue to promote that object so long as they held those views. Some few years ago a proposal for the fusion of the Society with the R.I.B.A. in view of the promotion of a Registration Bill by that body was on the eve of being consummated. The fates, however, decreed otherwise, and within the last few months the Institute had changed its policy, and was coming forward with a suggestion for a voluntary system of registration within the Institute. It was, of course, quite competent for them to do so, but what he wished to point out was that such a scheme was not in the opinion of the Society, one which would stop the abuse which existed in the profession in the present day, whereby any person could call himself an architect. As a matter of fact, it would accentuate it, for it was proposed that certain persons should be entitled to call themselves " chartered architects " and others " registered architects " under the ægis of the Institute. It was obvious, therefore, that the very men who, under Statutory Registration would be prevented from describing themselves an " architect " would, under the proposed scheme to which he had referred, have a monopoly of the title " architect," However, it was a matter which the profession must decide, but so far as the Society and its Members were concerned they were convinced that nothing short of Statutory Registration would meet the case. Personally, he sincerely hoped that eventually the views of the two parties might be synchronized, and some compromise effected which would enable them to agree once for all on this question of architectural politics, and enable them to devote their whole attention to other matters more congenial to them as architects.

He still thought that his suggestion made some time ago that the Institute should look after the art of architecture, and leave the Society to deal with the business side of the profession was one which had considerable possibilities. It had met with adverse criticism from the professional Press at the time, but recently it had been brought forward by one of the leading journals as their own proposal, and he was, therefore, not alone in expressing these views. There were just one or two matters of what he would call domestic interest to which he would like to refer, because of their bearing on the profession generally. One was the establishment by the Society of an Advisory Committee, backed by a Professional Defence Fund, for the purpose of assisting Members who might be involved in litigation on questions of principle affecting the whole profession. They had not yet been called upon to take up a case of this kind, but in at least one instance, the fact that such facilities existed induced the opposite party to settle the matter out of Court. They also had evidence that the high standard of professional Ethics which was insisted upon in the Society was of the greatest moral support to its Members in enabling them successfully to resist suggestions which were sometimes made to them, he was sorry to say, by public bodies and others, such for instance, as inviting them to compete for professional work on the basis of fees. A matter which the Society had recently taken up was an investigation of the reason for the high cost of building in London, with a view to presently endeavouring to show that the cost of building in this country is very much greater than in others, and to find the reasons for this. It was a somewhat colossal undertaking, and the enquiry was one which must extend for many months, but even if they were only able to point out the weak spots and suggest a remedy, he thought they would have accomplished a useful work. One of the problems which arose uot of this matter was that connected with labour disputes, and the methods adopted in this country for dealing with them, as compared with those of other countries. One difficulty was that even where the available machinery in this country has been put into force and disputes had been settled, the parties thereto had ignored the terms simply because there was no legal obligation upon them to carry them out. What was wanted, in his opinion, was Statutory powers to make a breach of the terms a penal one.

Col. F. S. Leslie, r.e. (Hon. Secretary), proposed the toast of "Our Guests," with which he coupled the names of Mr. A. O. Goodrich, j.p. (Vice-Chairman of the

London County Council) and Mr. W. Edward Woolley (President of the Surveyors' Institution).

Mr. A Ogilvy Goodrich, J.P. (Vice-Chairman of the London County Council), said he sat for four hours a week on what was known as the "dry bones" committee of the Council, the Building Acts Committee, in the examination of a great many plans. He was bound to say he, like most of the members, failed to understand many of the points, but largely relied on the judgment and advice of their officials and on Mr. Andrew Taylor. He thought it would be desirable that architects should revert to the practice of signing their names on the foundation-stones of the buildings they planned, and felt it would be a great omission if the name of Mr. Ralph Knott were not prominently displayed on a memorial stone of the new County Hall, which he won so brilliantly in a fiercely-contested competition. The London County Council were doing all that they possibly could to purify the atmosphere and to beautify London by taking action against Railway Companies and others for the emission of black smoke. The London County Council would, he felt sure, sympathise with them in their efforts to obtain registration.

Mr. W. Edward Woolley (President of the Surveyors' Institution) also responded. As a Midland Counties man, he felt that much might, and ought, to be done to increase the amenities of our Midland towns, and especially of the suburbs. He was showing a friend the town with which he was most closely connected, and his guest remarked: "You tell me that many of your fellow townsmen have been the architects of their own fortunes; I suppose they have also been the architects of their own houses."

The toast list was interspersed with musical items by Miss Nellie Innes and Mr. Sivori Levey, and exhibitions of modern magic and experiments in telepathy by Professor R. Anders.

The late Mr. W. G. Kirkaldy, A.M.Inst.C.E.

Much regret was expressed at a recent Council Meeting at the news of the death of Mr. Kirkaldy, whose services were so frequently requisitioned by architects in that branch of engineering, with which his name will always be associated.

It is just two years ago that Mr. Kirkaldy last rendered the Society a service by taking part in a discussion on "The Testing of Materials for Reinforced Concrete," and giving demonstrations to illustrate his observations. On that occasion, many of his tests were embodied in the paper by Mr. A. Alban H. Scott, and stand in the records of the Society as an example of the readiness with which Mr. Kirkaldy placed his expert knowledge freely at the disposal of his professional brethren.

Registration News.

The text of the Society's draft Registration Bill was published in our issue of January last. We now print the proposals of the R.I.B.A. Council for voluntary registration by the Institute.

It is understood that if these proposals are adopted, the Institute will make an application to the Privy Council for a new Charter and Bye-laws. In this case the Society will take steps to oppose the granting of the Charter.

VOLUNTARY REGISTRATION BY CHARTER.

The following is the draft of the proposals of the R.I.B.A. Council.

(1) The Charter to enable the R.I.B.A. to constitute and maintain a Register of persons who have shown,

- (*a*) In the first instance by the possession of certain qualifications (see Clause 3),
- (*b*) In the future, and after the first establishment of the Register, by their having passed certain prescribed tests (see Clause 5),

that they are qualified for the practice of Architecture.

Fellows of the R.I.B.A. elected by the Council under Clause 2 of the Supplemental Charter of 1909 to be admitted to the Register without having passed the "prescribed tests."

(2) All persons so inscribed on the Register to have the right to call themselves "Registered Architects," but only Corporate Members of the R.I.B.A. to have the right to call themselves "Chartered Architects."

(3) In the first instance there shall be inscribed on the Register :—

- (*a*) The Fellows, Associates, and Licentiates of the R.I.B.A.
- (*b*) All such members of the Allied Societies in the United Kingdom as are engaged in the practice of Architecture and are recommended by those Societies and approved by the Council of the R.I.B.A.
- (*c*) Any person who shall prove to the satisfaction of the Council of the R.I.B.A. that at the date of the granting of the Charter he had been for at least two years engaged as a principal in the bona fide practice of Architecture, or had served for ten years as pupil, apprentice, or assistant, or partly as one and partly as the other, to a person or persons who at the date of the granting of the Charter is or are entitled to be enrolled on the Register ; and who shall be approved by the Council of the R.I.B.A.

No applications for admissions to the Register under 3 (*b*) and 3 (*c*) to be entertained after three months from the date of the granting of the Charter.

(4) Every Architect on the Register must sign a form of declaration prescribed by the Council.

(5) The "prescribed tests" shall be the Examinations qualifying for admission to membership of the R.I.B.A. and the fees payable for entering for such Examinations shall be identical with the fees payable by candidates for the R.I.B.A. Examinations. Candidates who have passed the Examinations shall be eligible for membership of the R.I.B.A.

(6) An annual registration fee shall be payable to the R.I.B.A. by all Architects on the Register.

(7) The Register to be administered by a Standing Committee of the R.I.B.A., whose functions shall be limited to supervision of the Register, to investigation of complaints in regard to the professional conduct of any person on the Register, and to reporting to the Council of the R.I.B.A. on matters connected with the Register only. The Committee's powers to be limited to reporting to the Council, by whom the required action will be taken.

(8) Representation on this Standing Committee and for the specific purposes only as defined in Clause 7 to be given to Licentiates. In all other regards the constitutional position of the Licentiates to remain as at present.

(9) The number of members of this Standing Committee not to exceed 21, in the proportion of 10 Fellows, 7 Associates, and 4 Licentiates, until such date as the class of Licentiates shall have expired.

(10) The Council to consist of :—1 President (Fellow) ; 4 Vice-Presidents (Fellows) ; 1 Hon. Secretary (Fellow) ; 5 Chairmen of Standing Committees (Fellows) ; 1 Chairman of the Board of Architectural Education (Fellow) *Ex officio.* 15 Ordinary Members (Fellows) ; 10 Associate-Members ; 2 Past Presidents (Fellows) ; 1 Representative of the Architectural Association (Fellow or Associate).

The President or other representative, being a Fellow of the R.I.B.A., of every Allied Society in the United Kingdom having not less than 50 of its members on the Register (or such other number as the Council may from time to time determine).

[Allied Societies having less than 50 members on the Register to be represented on the Council in rotation.]

(11) The R.I.B.A. to be empowered to issue a scale of fees payable to Architects on the Register.

(12) The R.I.B.A. to have enlarged powers of holding property.

(13) The By-law in regard to the Board of Architectural Education to be revised so as to confer upon certain Schools of Architecture the privilege of representation on the Board.

A Comparative Statement.

The following Comparative Statement shows at a glance the effect of registration by " Statute " and by " Charter " :—

STATUTE.	CHARTER.
The Society is promoting a Bill in Parliament for the Statutory Registration of Architects, Covering the Whole Profession, Irrespective of Membership in any Architectural Bodies, and in the Interests of the Community.	The Institute is promoting proposals for a new Charter, to enable it to establish a voluntary Register of " qualified " Architects, in the Interests of the Institute.
REGISTRATION BY STATUTE, As Proposed by the Society.	REGISTRATION BY CHARTER, As Proposed by the Institute.
(*a*) Would establish a register of persons Recognized by Law as qualified Architects.	(*a*) Would establish a register of persons Recognized by the Institute as qualified Architects.
(*b*) Would establish a governing body representative of the whole profession with administrative and disciplinary powers, enabling them (inter alia) to strike Architects off the roll for professional misconduct, and thus Prevent them from continuing to practice as Architects.	(*b*) Would establish a Standing Committee with powers restricted to reporting to the Council of the Institute, whose utmost disciplinary action would be limited to removing persons from the register for professional misconduct ; a proceeding which would not Prevent them from continuing to practice as Architects.
(*c*) Would protect All vested interests.	(*c*) Would protect Certain vested interests only.
(*d*) Would give All qualified persons the right to register.	(*d*) Would reserve to the R.I.B.A. Council the right to veto qualified applicants for registration.
(*e*) Would Prevent unqualified persons from practising as Architects and from recovering fees.	(*e*) Would Not Prevent any unqualified persons from practising as Architects, or from describing themselves as Architects. Thus, an Abuse which it is one of the Aims of Statutory Registration to Stop, would be Perpetuated under such a Voluntary System of Registration.

Registration in Queensland.

The Brisbane Telegraph, of March 3rd, states that Mr. Chambers, the President of The Institute of Architects, waited on the Minister for Public Works, Hon. W. H. Barnes, on March 3rd, with a request that a Bill should be introduced for the registration of architects. The Institute considered that such a step would bring about an advancement in architecture, and argued that it was necessary in view of the modern advances in construction, and sanitary and engineering science. It was claimed that similar action had been, or was about to be taken in the Southern States. Mr. Barnes was told that registration would bring to the profession better qualified and more highly skilled men ; would protect the public against incompetence, inexperience, collusion, fraud, and wasteful expenditure ; would secure a greater protection of public health and safety by scientific ventilation of buildings and proper fire-resisting construction, and by an expert knowledge of sanitary science generally ; and would reveal to the public the experienced and competent, against the inexperienced and incompetent. On behalf of the architects, it was claimed for registration (*a*) the placing of the architectural profession on a sound and recognized basis ; (*b*) the direction of architectural education in the right channels, as mentioned previously ; (*c*) examination of candidates before admission to the ranks of registered architects or the issuing of a diploma ; (*d*) authoritative right to deal with all matters pertaining to the profession,—that is, with the rights, privileges, emoluments, and discipline of registered architects.

Mr. Chambers handed to Mr. Barnes a copy of a draft Bill which had been prepared by the Institute.

The Minister promised Mr. Chambers that the matter would be submitted to the Cabinet, remarking that until the details of the Bill had been looked into, it would be quite impossible for him to make any promise.

The question of Registration of Architects has been before the Queensland Institute, and the New Zealand Institute of Architects have had a Bill passed which gives them this protection. The Queensland Institute has been in communication with the New Zealand Institute, who have furnished them with copies of the Bill. It is hoped that the Queensland Institute this year will take steps to have a Bill passed through Parliament ; to insure this, it will be necessary to deal with the matter without further delay. A Bill similar to that passed by the New Zealand Parliament would, it is thought meet their requirements, and the incoming Council will be asked to appoint a Committee to go into the matter without delay. It is hoped that the members will give all the assistance possible to secure a measure that will place the Architects of Queensland on a recognized and responsible footing. If this is accomplished, it is felt the Institute will have done good work and the profession will benefit thereby.—*Q. I. A. Annual Report.*

ARCHITECTURAL POLITICS.

Mr. E. Coath Adams, M.S.A., in the course of his valedictory address to the Devon and Exeter Architectural Society says, attempts have been made to draft a Bill to be submitted to Parliament, but obstacles have been met with, and opposition from one quarter or another more or less difficult to understand. As with most new ideas or innovations, it takes time to overcome prejudices and convince people; still, it is bound to come sooner or later, and so it should, not only in the interest of the architect, but also the public, and architecture? If a broad view is taken, what matters it how it is attained? or by whom? We are told the Royal Institute have been advised there are Parliamentary and constitutional difficulties, and it would be impossible for them to promote successfully a Bill at present.

The Society of Architects have drafted a Bill, and do not seem to have the same difficulties, then why not support the Bill which has more chance of success? a Bill which will protect all vested interests, and provide for the welfare of the community, the art, and the profession, in the future.

On so vital a question it seems incomprehensible that as a profession, we cannot pull together. My personal feeling is of regret that the Royal Institute is unable to see its way clear, and under the circumstances, I hail with joy and thankfulness, irrespective of the promoters, of a Bill which is for the general good, and fair to all.

I believe it to be admitted by the Royal Institute that the majority is in favour of registration; indeed, it might be said that the profession almost unanimously demands it.

The Royal Institute is about to apply for a new charter, but this can only concern its own members, and cannot deal with the profession as a whole; this will not meet our demands therefore, whilst giving its own members certain benefits no doubt, it is only a half-way measure.

It is greatly to be regretted, but I fear it is a fact, that there is a certain amount of feeling between those inside the Royal Institute against those outside. Harmony and agreement amongst architects as the real essentials, are, I am convinced, the consummation devoutly to be wished.

THE NEED OF PARLIAMENTARY AUTHORITY.

The Registration of architects in England has become a matter of serious import, and may eventually disrupt the profession. Men standing high in the realm of art are widely at variance on this subject, as are the different architectural bodies. The Society of Architects in London have drafted a Bill called the Architects Act, 1914. . . .

This Bill is of interest to the Canadian architects not only because it is a problem confronting us at home, but also since it contains clauses relating to their work in the British Isles. Clause 34 states that an architect residing in any British possession and properly qualified shall upon payment of a fee not exceeding five pounds be entitled to register without examination.

The R.I.B.A. on the other hand, having transacted all business by charter, and having grown under it to a high plane of influence and power, feel that it would be useless to attempt such legislation. . . .

Surely, it is incumbent on every architect in Canada to consider seriously the subject of registration : the years of struggle over this problem in England, and the wide difference of opinion resulting therefrom. In speaking of the Institute's action, Sir Aston Webb says : "But fancy an Act of Parliament binding architects ! There are not three architects in the House of Commons." Is this not true in Canada ? It behoves us to anticipate our future deliberations and secure a better representation. The architectural profession is of such a size and so necessary for the artistic and practical development of our country that it is deserving of ample authority in the Parliament of the people in order to institute and carry through any measure conducive to the welfare of its members and its prestige. It makes little difference whether we feel the need of Government authority or not in respect to the qualifications of the architect, the fact remains that we should become a potent factor in the development of Canadian art. This is very evident in reviewing the growth of architecture under legal authority in the past. And we cannot afford to sacrifice the present opportunities and the future prospects by allowing our rights to be handled wholly by men with little or no training in the world of art.—*Construction.*

Registration of Auctioneers.

In our issue of October, 1913 (No. 72, Vol. VI.), we referred to the registration proposals of the Auctioneers and Estate Agents' Institute. Since then the Bill has been read a first time in the House of Commons (March 19th, 1914), and a copy of it is now before us.

The object of the Bill is to establish a Register of persons dealing professionally as Auctioneers or Estate Agents with real estate and to prescribe the qualifications for admission to the Register.

The Bill also proposes to constitute a Registration Board to be composed of members nominated or elected by the Board of Trade, the Auctioneers' and Estate Agents' Institute of the United Kingdom, and the Surveyors' Institution, which Board is to be endowed with certain disciplinary powers in regard to persons whose names are entered in the Register.

The Bill proposes, after the expiration of a period which will enable duly qualified persons to be entered on the register, to prohibit unregistered persons (with certain exceptions) from acting professionally as valuers or auctioneers of land or buildings, but it does not seek to impose any restrictions upon the right of an unregistered person to carry on the other branches of the business of an Auctioneer or Estate Agent.

Subject to the above-mentioned prohibition, the principal purpose of the Bill is to provide for the keeping of a record of persons possessing such a knowledge of the subjects appertaining to the business as to qualify them for registration. All persons possessing the necessary qualifications will be entitled to be registered.

The First Atelier of Architecture.

The first sign of interest taken by the younger generation in contemporary French work, the first indication that the English student realized there was anything to be learnt from the French, took the form of more or less intelligent imitation of methods of rendering and mannerisms of design which however excellent in themselves, were the superficialities rather than the fundamentals of modern French architecture. This is not altogether to be wondered at, as it is the surface qualities which are most obvious at a first glance.

It might perhaps be counted unto the Atelier for righteousness, even by the sternest of its critics, that it has endeavoured to give the English student an opportunity of probing beneath the surface and of concentrating on the fundamental principles which are the permanent basis of French architecture, rather than on the superficialities of contemporary taste, which vary according to the national mood of the moment. Even the most convinced and determined opponent of anything that may possibly make for cosmopolitanism in art might be disposed to admit that if we must be influenced by French architecture at all it is better to be influenced by its clear logical reasoning and sublime common sense—by its respect for principle, by those qualities, in short, which have value to all nations alike—rather than by those qualities whose chief interest lies in the expression of a temperament peculiar to France.

It is surely a poor compliment to the intelligence and character of the English student to suggest that he will be deaf to the appeal of reason and will be blindly carried away by extravagances of taste which we may not happen to admire. Neither does it show much faith in the national characteristics, of which we have heard so much lately, to fear that they will be endangered by contact with the logical processess of the keenest intellects in Europe, or by an acquaintance with architectural principles as understood by a nation of artists. A robuster faith in the vitality of our race might lead us to believe that the native genius of the rising generation only needs more knowledge of the possibilities of architecture and a training in principles equal to that of France to enable them to lead the world. At any rate it was in this faith that a long-cherished project was put into execution by the formation of the Atelier, and in this faith it is being maintained.

In a recent leading article in the *Builder* it was pointed out that the great principles of architecture are not the exclusive property of the French, but are the common property of all nations. This is so, or should be so. But it has not yet been denied that we in this country have hitherto so neglected this property that it has ceased to have much practical value, while the French, more than any other nation, have so developed it as to be in receipt of a handsome revenue. The Atelier attempts to do what it can to promote in this country the same systematic development of this common property in the hope of an even greater return, and so far as present indications go this hope has every chance of being ultimately realized.

The Atelier continues to grow, and the ideas for which it stands to find ready acceptance. A considerable number of new members joined in the autumn, bringing the total up to ninety-eight. Of these about forty are working members, who have taken part either in the monthly competitions or the fortnightly twelve-hour sketches as often as circumstances permit. A definite programme, with dates of competitions and criticisms for the current year, was drawn up by arrangement between the Patron and the Atelier Committee, and has worked very well, and progress during the winter towards that consolidation which is so essential has been most satisfactory.

As the experience of the members varies considerably it was found advisable to set two subjects each month, one of which is more in the nature of an application of an Order to a definite purpose. Excellent studies of these smaller subjects have been produced, which form a solid preparation and basis for the larger ones. Till such time as all new members can produce evidence of having received such preliminary training elsewhere it is thought desirable to encourage these studies in the Atelier, and comparative beginners able to work in the daytime on preliminary studies would be approved by the Patron for election to the Atelier.

By the kindness of an anonymous donor a sum of money was placed at the disposal of the Patron to be devoted towards the provision of prizes, and it was decided to use it for the provision of a specially-designed medal to be awarded every year.

On the suggestion of a sculptor member, Mr. F. Derwent Wood, A.R.A., the Committee approached Professor Lanteri, who kindly consented to set the design of a suitable medal as a subject for competition among the sculptor students of the Royal College of Art, the Beaux Arts Committee offering small prizes. The response to the suggestions was most gratifying. The plaster sketches were exhibited in the Atelier and judged by the usual Atelier jury, supplemented by Professor Lanteri, and by Mr. Alfred Drury, A.R.A., who was good enough to act in the unavoidable absence of Mr. Derwent Wood. A most excellent design by Mrs. Wade was selected as being the one which most fully carried out the programme, while a delightful design by Mr. Jagger, unsuitable, however, for reduction as a medal, was acquired for the Atelier. It is hoped that the medal will be available for award to the work of the current year.

It is also hoped that this competition will be the beginning of a better understanding between the sculptor and architect students, and that as the members of the Atelier become more conversant with the principles governing architectural sculpture and acquire more knowledge of the figure, it will be possible to set programmes for subjects which could be worked in conjunction with the sculptors.

A. R. JEMMETT, in *The Builder*.

Review.

Home Interiors. By R. Goulburn Lovell, A.R.I.B.A., M.S.A. Caxton Publishing Co. In five parts, 21 in. by 15½ in., in portfolio form. 15*s.* per part.

There are several methods of dealing with such a problem as the decoration of a home. The making of the old pattern books of previous generations of architects was one way, or a book may be written, as Eastlake's was some forty years ago on Household Taste, in which the taste of his contemporaries was severely criticized and his own expounded, with designs upon which the present generation would pour some of his own well-chosen invective if it ever troubled to turn his pages. A third method is to help others to solve the many difficulties of house decoration by a series of practical hints and drawings.

Mr. R. Goulburn Lovell, in *Home Interiors*, has chosen the third and better way. Beyond a plea for greater courage in colour he makes no attempt to criticize modern taste, but by description and drawing proceeds to give his own ideas on the subject together with a system and suggestions for varying them to suit different conditions, or to meet the idiosyncrasies of others.

Now is the renaissance of colour. It is to be seen as one walks abroad, and in the books one reads :—

> " For down below
> The cobwebbed room this grey man plies
> A trade, a coloured trade. A show
> Of many-coloured merchandise
> Is in his shop. Brown filberts there,
> And apples red with Gloucester air,
> And cauliflowers he keeps, and round,
> Smooth marrows grown on Gloucester ground,
> Fat cabbages and yellow plums,
> And gaudy brave chrysanthemums,
> And times a glossy pheasant lies
> Among his store, not Tyrian dyes
> More rich than are the neck-feathers ;
> And times a prize of violets,
> Or dewy mushrooms satin-skinned,
> And times an unfamiliar wind
> Robbed of its woodland favour stirs
> Gay daffodils this grey man sets
> Among his treasures.*

Though it is strange that no stress is laid on the charming effects that may be obtained in a room from the accidental colours of flowers and fruits, it is not surprising to find colour made a special feature of this work. In addition, as the interiors are designed to be economical in execution, good colour schemes have been relied upon as costing no more than bad, and as being less expensive than good carving. Tiring modern adaptations of Adam and Sheraton rooms, which are so much the vogue at present, are thus avoided. Five pages out of the seven given to the introduction are devoted to the consideration of colour. The hints contained therein are amplified by three colour charts which, " unerring in judgment," enable colour harmonies, it is hoped, to be selected with the same certainty as they are said to work. Whether this hope will be fulfilled in the case of the enterprising draper mentioned is open to doubt, but for anything that may smooth the path of the worthy gentleman, and that may lessen the shocks he is capable of giving our sensibilities, we should be only too grateful. The use of the charts, and the selection of good colour schemes are fully treated, in addition to which thirty fac-simile water-colour reproductions illustrate the twenty rooms for which decorative designs are given. Having dealt so completely with the choice of colours, it is a pity no space has been found for giving the different methods of obtaining various textures such as flatting, varnishing, staining, graining (to obtain broken colour), oiling, polishing and distempering, and to describing the different varieties of wall-papers and draperies, with their effects, appropriate uses and relative cost. In one place where Mr. Lovell recommends a very light red tone for the ceiling of the red and brown dining room—an instance of his courage in colour—the need of this is very apparent. The effect could be obtained by the first coat being darker than was required, and by finishing with white allowing the red to show through the brush-marks. The result would be superior to an even pink tint over the whole surface; but there is no hint as to how the effect is to be obtained.

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*Mr. John Drinkwater.

It is only by giving designs completely thought out that such a subject as *Home Interiors* can be adequately attacked. As such they are laid before the public, and it is from the study of them that hints and suggestions may be obtained for the actual problems that present themselves. This is fully recognized in the book, and alternative schemes for the decoration of each room are proposed. Although they are treated as for separate rooms or for rooms opening out of each other, the advisability might have been emphasized of considering the interior decoration of the house as a whole. For those "setting up housekeeping," and for those architects who have the privilege of attempting to satisfy their, as yet, unknown wants, or of designing houses, for transitory inhabitants such as are met with in garrison towns, this book should prove of great value with its delightful wall-cupboards, window-seats and writing tables, and even to those with household gods with which they do not wish to part, the schemes of decoration and the colour charts should be of great assistance, especially at this season of the year. The designs, which are supposed to be for the rooms in houses varying in rental from £25 to £75 a year, are treated in an effective and economical manner. Perhaps too economical in some cases as for instance where an electrolier, with candle-shaped lights and made of zinc lacquered bright copper, is commended for its cheapness. On the other hand, the schemes would not prove economical if the fittings were treated as tenant's fixtures as suggested in certain cases; they would have to be parted with for a mere song, being designed for their place, and of little use elsewhere.

In glancing through Section I., which represents much careful work, the result of long experience, a few points offer themselves for remark. The scale of half full-size for the working details is a little deceptive. Quarter full-size would have avoided this, given all that was required, and allowed space for details of other features. The reproductions do not appear always to do justice to the water-colour drawings from which they are taken, a pair illustrating a room being in some cases in different keys. An interesting comparison on which much could be written might be made between these illustrations by the latest processes of modern reproduction, and those employed at even so recent a date as Eastlake's book. Immediately over a fire-grate is not a suitable place for either a picture, or a mirror. The best way of hanging pictures may be as stated, always provided the walls or partitions will take the nails. For this reason picture rails are often preferable, and if the pictures are hung from two hooks, there is not much liability of disarrangement when dusting. It would have been better to have shown the door as shut in the perspective of the red and brown dining-room. From the point of view of domestic economy, it is risky to have choice China vases and photograph frames interspersed amongst books on book-shelves. No satisfactory way of hanging the valance (the word "pelmet" does not appear in Dr. Murray's New English Dictionary) is given. The curtains may be easily removed from their hooks for cleaning, but if the valance is nailed up with tin-tacks there are only two courses open, either to risk damaging it by the removal of the tacks, or to leave it up to show by contrast the cleanliness of the newly washed curtains. The enthusiasm displayed for casement curtains is at times almost incongruous, and combined with patent pendent gas brackets calls to mind a devotee of Golder's Green hankering for the flesh-pots of Brixton.

Some may not agree with Southey, that a house to be perfectly furnished for enjoyment requires a child rising three years old and a kitten rising six weeks. These, however, do not come within the practice of architects. Architects can only supply the outer shell lined with all the refinement and art Mr. Lovell suggests, and to that extent modifying and controlling the impress each individual stamps on his dwelling-place. Whether it be a home will depend largely on himself.

W. J. DAVIES, A.R.I.B.A.

Correspondence.

To the Editor of "The Journal of The Society of Architects."

Civic Exhibition, Ireland, 1914.

SIR,—On behalf of the Executive of the Civic Exhibition which is to be held in Dublin during the summer of this year, I beg to enclose, in case it may be of interest, a statement containing the conditions and particulars of the Competition for a premium of £500, which has been offered by His Excellency The Lord Lieutenant of Ireland, for the best design of a Plan for the improvement and extension of Dublin.*

I may add that the conditions, etc., have been very carefully compiled by the Technical and Advisory Committee of the Housing and Town Planning Association of Ireland, with the expert advice of Professor Patrick Geddes of Edinburgh, and Mr. John Nolen, M.A., Sc.D., of Cambridge, Mass. These two gentlemen will also, by request of the Lord Lieutenant of Ireland, act as Adjudicators, and they will have as a colleague Mr. Charles McCarthy, Fellow of the Royal Institute of the Architects of Ireland, City Architect of Dublin.

It is evident that a good deal of public interest in the matter has been evoked, and applications from intending Competitors are already being received.

The Executive of the Civic Exhibition venture to hope that you will kindly give publicity to this announcement.

E. KAYE-PARRY.

Secretary, Town Planning Competition,
Civic Exhibition, Dublin,
April 9th, 1914.

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*[These are on file for reference.—ED.]

Telephone "Exchange" Transfer.

NOTE.--On and after May 4th, the Society's Telephone Number and Exchange will be 942 MUSEUM, instead of GERRARD.

Architectural Competitions.

Members are requested not to take any part in the Hale Grove Gardens School, Mill Hill, Competition, without first ascertaining from the Secretary whether the conditions are approved by the Society.

The Membership.

Deceased.—EDWIN BOWMAN, Newcastle-upon-Tyne, *Member.*

Elected.—BASIL WALLACE FITCH-JONES, Sierra Leone; FREDERICK CROSS KING and GEORGE GRANT KING, Belfast; ARTHUR LARKIN PARKER, Oakham, Rutland; BENJAMIN LEWIS PRITCHARD, Brecon. *Members.*

Resigned.—JOHN HOY DUN, Kinross, *Member.* E. E. KEEFE, Norwich, *Student.*

Reinstated.—C. T. MITCHELL, Johannesburg.

Ordinary Meeting.

The Sixth Ordinary Meeting of The Society of Architects for the Session 1913-14, will be held at 28, Bedford Square, W.C., on Thursday, May 14th, at 8.30 p.m.

Agenda :—

1. The President to take the Chair.
2. Minutes and matters arising.
3. Nominations and Announcements.
4. Election of Members.
5. Lantern Lecture on "The Expression of Form," by MR. LESLIE WILKINSON, A.R.I.B.A., Assistant Professor of Architecture, London University. Ladies are invited.

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The Society is not, as a body, responsible for the opinions expressed by individual authors and speakers.

The Beautifying of London.

Although the suggestions made by Mr. Davison and others of a similar nature are very nice in theory, I am not at all sure that they are practicable. As for the criticisms levelled at our city, my reply is that London has many charms.

The first thing to be done before we embark upon any scheme of beautification is to constitute a proper authority to deal with the whole problem. We are in need of proper control of architectural matters, such as would be exercised by a Ministry of Fine Arts, which would look after and regulate improvement schemes, so that we should not do things haphazard, and leave them to chance.

Personally, I advocate the preparation of a map of London showing all improvements contemplated, however distant their realization may be—an ideal London on paper, that is. And when this map has been prepared and agreed upon by the authorities, it should be the aim of everybody to carry it out.

As opportunities arise, such as big fires, for instance, improvements could be made in accordance with the settled scheme. When the chance comes along people would not have to wonder how they should take advantage of it ; the whole thing would be cut and dried.

The real pressing improvements should be carried out at the earliest possible moment with the aid of Imperial funds, for after all this is an Imperial city. There is no doubt that we shall have to spend a great deal more money in improving London than we have spent in the past.—MR. PERCY B. TUBBS, F.R.I.B.A., M.S.A., in the *Evening Standard*.

Proceedings.

The Sixth Ordinary Meeting of The Society of Architects, for the Session 1913-14, was held at 28, Bedford Square, London, W.C., on Thursday, May 14th, 1914, at 8.30 p.m.

Mr. Percy B. Tubbs, F.R.I.B.A., President, having taken the Chair, it was resolved that the Minutes of the last Ordinary Meeting, as printed in the *Journal*, be confirmed and signed.

Thirteen nominations for Membership were announced, and a ballot was taken for the election of the following Candidates to Membership, and was declared to be unanimously in their favour.

Bridgwater, John Percival,	3, Temple Row West, Birmingham.
Heathcote, Alexander Thomson,	St. James' Buildings, 89, Oxford Street, Manchester.
Imrie, George Blair,	46, Bloomsbury Square, W.C.
Mann, William Robert Burtenshaw,	22, St. Alban's Road, Leicester.
Price, Thomas George, P.A.S.I.,	Cross Hands, Llanelly.
Rose, Ernest,	Board of Executors' Buildings, Salisbury, Rhodesia.
Thomas, Albert John,	28, Upper Park Rd., Hampstead, N.W.

Graduates and Students.

It was announced that the Council had transferred and admitted Bonn Langford (London), Student, to the Register of Graduates and had admitted C. E. Cooper (Blackpool) to the Register of Students.

Students' Competitions.

The Chairman announced that the Assessors in the Travelling Studentship Competition had placed Design No. 30 first and that the Council had confirmed their award. He then opened the Sealed Envelope and declared the author to be Charles Bell, of 72, Forest Avenue, Aberdeen.

The Chairman further announced that the Essay Competition for the quarter ending April 30th, for which there were two competitors, had been awarded by the Assessors to Bright Fraser, of Wallasey, for his essay on Norman Architecture, and that the President's Prize offered for a scheme for the Architectural decoration of the Ball Room of a Royal Palace had been withheld, the one design submitted being of insufficient merit.

Mr. Leslie Wilkinson, A.R.I.B.A., then read a paper on "The Expression of Form," illustrated by a number of Lantern Slides. A discussion ensued in which the following took part:—Stanley Salisbury, A.R.I.B.A., G. A. T. Middleton, A.R.I.B.A., H. Freyberg, F.S.I., Ellis Marsland, Noel D. Sheffield and the Chairman. A hearty vote of thanks was accorded to the lecturer, and the proceedings terminated.

The Expression of Form.

By Mr. Leslie Wilkinson, A.R.I.B.A.,

Assistant Professor of Architecture, London University.

As you no doubt expect, I propose in this paper to discuss the question of Drawing, and I hope that the importance of the subject in our profession will be sufficient excuse for my venturing to address you on what may seem such a commonplace topic.

Architectural drawing is sometimes rather slightingly referred to as something half way between the methods of the engineer and the painter. But I prefer to see in it the combination of the merits of each, the precision and utility of the one with the feeling and beauty of the other.

That skill in drawing is a very necessary part of an architect's equipment is now fortunately generally admitted, but there are still some who belittle the necessity and quote cases in support of their contention, but I venture to think that even in these cases the great men referred to would have done even better had they been greater masters of draughtsmanship.

The layman of course has always laid due stress on the necessity of an architect being able to draw, and I suppose the fact that a boy is fond of drawing has more weight in the choice of architecture as a profession than anything else. This is unfortunate in many cases, as the young man finds that contrary to the ideas of his elders and betters many other varied attainments have to be mastered, some very exacting and contrary in their nature to free drawing. He finds that there is something more to be done than draw pretty sketches and huge fees, and that the builder, good man, does not do everything else off his own bat, also that there are such things as legal forms and accounts.

Drawings may be classed in three groups :—

1st. Those which are instructive to the author.

2nd. Those which are instructive to the reader.

3rd. Those which are a delight to the beholder.

And some drawings may combine in themselves the characteristics of all three groups. Also we must not forget the pleasure which the author obtains from the production of a drawing, a pleasure entirely the author's own, and independent of the result produced or its fate.

First then as to the educational value of drawing. That drawing teaches us to see will be acknowledged, that is why we sketch and measure, isn't it ? The resulting production and the delectation of our cousins and our aunts is quite a secondary consideration. Now, if we find that we see a great deal more in a building if we sketch it than if we merely look at it, and as after a time this habit no doubt developes our sense of observation, surely this desirable result would also be produced in the public were they instructed in drawing. And where is the difficulty in this ?

Drawing is a much older art than writing, and perhaps were I an Irishman I might say that the earliest writing was drawing. Then I suppose it was found that whilst drawing excellently expressed ideas of form it was deficient in expressing abstract ideas and so writing was invented and ousted the practice of drawing. Now, everybody has to be taught to write, and that the impossibility of accomplishing this is not admitted is perfectly justified.

But with drawing it seems to be decided that a heaven sent genius is necessary, a genius that may be developed certainly but not produced. It may be claimed that trained mediocrity will produce better results than untrained genius, for while we always have our geniuses producing great works in all ages, we cannot live on genius alone, but for any general advance must rely on the trained competence of the many, the raising of the average of accomplishment. The chief offenders, the gentlemen who produce those rows and rows of suburban villas (gross abuse of a beautiful team), and impossible shops, will not mend their ways until the public are shocked by these things, as they certainly are not at present, their sense of beauty or even what is reasonable being evidently, shall we charitably say dormant.

In these days of Ratepayers' Protection Societies, a mercenary age understands at once that the men who coined the phrase referred to the ratepayers' pocket as the worthy object of their endeavours. But is not our sense of beauty and order at least in equal need of some such protective machinery ? Were all trained by drawing to observe form (if necessary instead of one of the many popular accomplishments which might be dispensed with), I think we should first be exempt from the charges of crankiness, even savoured with envy, when we venture to criticize executed work, and later on perhaps even receive the encouragement of sound appreciation and constructive criticism to the benefit of architecture.

Drawing is not only a means of artistic culture, *i.e.*, a thing desirable in itself, but a means to an end, a helpful instrument in the study of almost any subject dealt with by master and student. Draughtsmanship, like language, is useful for something else than the expression and communication of ideas. It is of great assistance in forming them, just as writing is a great help in sustained thinking. Writing serves not only to define our ideas but to fix them.

Drawing is an invaluable addition to our intellectual appliances, and it is because drawing may thus be made useful, not because it is the first step in the practice of the fine arts, that it deserves an equal place with writing in schemes of general education.

To quote a passage from James Malton's book on Perspective, which in addition to showing sound common-sense, is pleasantly couched in the leisurely phraseology of a century ago, describing himself as "architect and draughtsman," Malton says: "Drawing, in my opinion, is a vehicle of communication among mankind, as necessary to be somewhat informed in, as the art of writing. The pen may express our sentiments, but not always our ideas and conceptions; at times, that can alone be done by the pencil. A mechanic is required to execute a new and singular piece of work; it is impossible he can thoroughly conceive it without a draft, the which, not being able to give, is a species of ignorance nearly as great as the not being able to write; and a deficiency that many an intelligent person has mortifyingly and detrimentally experienced. The most laboured description of scenes, conveys not half so perfect an idea of their form and effect, as a few just lines of the pencil. Drawing is an universal language, comprehensible to a very savage, and plainly speaks to every eye. No person, therefore, desirous of a liberal education, should be deficient in a tolerable acquaintance with the first principles of delineation, perspective."

There is a lot in that. You will agree that what architecture has suffered from and is still suffering from, though, I hope, to a lesser extent, is the ignorance and therefore lack of interest of the great public.

As architecture deals essentially with expressive forms and their production, colouring and combination to satisfy the senses of beauty and comfort, and as drawing is the most natural means of the expression of form, it seems to me that were the public better informed in the art our country would be speedily freed from much of its present disfigurement.

ALTERNATIVES.

The only alternative to drawing as a means of expression of form is of course writing, but except in the case of very simple and commonplace forms, this is apt to be clumsy and seldom perfectly clear. The vivid pictures composed by our great poets and writers, Tennyson's *Palace of Art* for instance, are marvels of literary skill; but does not their success as descriptions depend on familiarity with scenes similar to those referred to? A verbal description of an original form is generally clumsy. The few just lines of Malton would be much more direct.

I was going to mention models as a means of expressing form, but I think we must rule them out as being rather realisations in miniature. But their value for purposes of study and explanation is unrivalled, and were it not for their expense I suppose they would be much more widely used than they are. A model provides the equivalent of an infinite number of perspective views and will often settle points with a layman, when perspective might be distrusted and geometrical drawings not understood, or what is worse, misunderstood.

PHOTOGRAPHY.

Photography has affected draughtsmanship in more ways than one, and must not be forgotten. At present limited to the expression of existing forms, it has ousted drawing for purposes of illustration to a great extent. But after the first triumph of its popularity, it has been realized that a drawing is capable of conveying an amount of feeling and character which is lacking in the camera's work. Although in the representation of textures and the recording of dimly lighted and inaccessable detail the photograph is of the utmost value. Again in reproduction work, process photography has dealt severe blows at the older methods of illustration. The school of men who produced those fine engravings, mezzo-tints, lithographs and etchings, showed themselves in their delineation of architecture rare masters of chiaroscuro and composition.

What is it that gives the art of drawing its value? To my mind the production of a drawing means the knowledge of tangible facts. We cannot express a thing until we know what it is. A great draughtsman will be so, not because he commands a skilful technique, has a fine sense for line, colour and composition, so much as because he *knows* the forms he deals with. Of lesser lights, some can draw the figure, some animals, some landscapes, some flowers and eatables, and some of us walls with doors and windows in them, but each his special subject only. All are draughtsmen and all can draw, but their failure in other subjects results from lack of knowledge, gained by observation crystallised by the habit of drawing.

When we say that the figure is the most difficult subject to draw, I maintain that we mean that the greatest knowledge is required to delineate the subtle contours of the most wonderful of all creations, the human form.

It is extraordinary to notice how some objects are closely studied, while others are denied that attention so necessary to their just expression. If we knew trees and figures of men, and animals and motor cars as we do columns and cornices, these objects might look more like their prototypes than they sometimes do in our perspectives.

I think we should devote more time to the serious study of figure drawing and landscape composition. The latter the setting, and the former the adornment and completion of our works.

The second group of drawings, *i.e.*, those instructive to the reader, includes working drawings, record drawings, and restorations (these latter also satisfying the condition for inclusion in group I. as eminently instructive to the Author also).

The mention of working drawings calls for a reference to Graphics. This most useful application of drawing to the solution of very practical problems is of course appreciated by the engineer and architect. With the diagram errors are less likely and results more obvious than can ever be the case with mere symbols. It may be said that Graphics deals with the expression of forces and numbers rather than form, but as in Graphics forces and numbers are as it were given form so that their functions may be more obvious, I have ventured to refer to the subject. Moreover, the high degree of accuracy required in these drawings is a very useful corrective to the less precise work sometimes indulged in.

Of drawings in the third group, *i.e.*, those which give pleasure by their intrinsic merits, apart from any question of association, it may be said that they are the result of absolute knowledge assisted by skill in "indication." The most advanced types of these are based on a close study of the effects of forms under varying conditions of lighting, movement and atmosphere. A lot may be learnt from the study of the works of acknowledged masters, and for contemporary work the R.A. The National Gallery, South Kensington, etc., offer opportunities, while the names of Canaletto, Du Cerceau, Hollar, Picanesi, Turner, Adam, Prout, David Roberts, Nash, Flockhart, Richards, Adshead and Walcot among others, will recall to you works which in a marked degree intrinsically possess the power of satisfying and pleasing.

One more great sphere for draughtmanship is seen in the opportunity it provides for men to show what they could produce if they had the opportunities. I wish we saw more of the fine imaginative (but not impracticable) conceptions by which the old men used to give evidence of their powers and their love of architecture for its own sake. Surely it is in such works as these that a man can show his real worth, sometimes even more than in his executed works, which in this country, are too often marred by lay interference and irritating conditions. I suppose our confreres in France are saved from this by the innate taste of their fellow countrymen, while the American client probably has the good sense to set less value on his own opinion than on that of his chosen expert in matters architectural.

Owing to their perishable nature, few mediæval and no earlier drawings exist for our information and study, but I imagine that what we should understand as complete working drawings or representations were not made. The ignorance of perspective is surprising, and the performances in small scale work, up to the Renaissance are almost childish. But that the early builders could draw, and to much purpose, if only full sizes on their templates, and setting out platforms, is very evident. With the Renaissance, drawing became of paramount importance. The introduction of the new manner, in the north-west of Europe, at any rate, depended almost entirely on graphic representations, the inadequacy of which in many cases led to the perpetration of unlovely compositions, which we know as Elizabethan and Jacobean, and which some men unaccountably feigning extraordinary ignorance would imitate to-day.

From this time to the present day, drawing has become of more and more importance, until to-day all the components of a great building may be in preparation in various places at the same time, and the whole assembled with record speed, the accurate relation of the parts being assured by the services of draughtsmanship.

Granted that drawings are now indispensable, let us see what the effect has been on architecture. Has this effect always been beneficial? Planning as now understood with all its means, could not of course be effected without small scale drawing; but has not its effect on elevational design been unfortunate in some cases?

Look at the work produced in response to the demand created by the industrial revolution of last century, and which composes our prosperous but unlovely Midland and Northern cities. With tradition thrown overboard, and chaos let loose by the misguided zeal of literary amateurs, and a public too intent on other matters to take heed. The accumulated heritage of centuries is squandered just as it is becoming enriched with a first-hand knowledge of Greek refinement.

The engineer is parted from the architect, and takes with him the life-giving element of adventure, and with it much precision in draughtsmanship (but he forgets to take with him the architectonic sense). The draughtsman, born and bred in the narrow artificiality of a new-made town, brought up, I will not say trained, at the drawing-board, produces out of his own inner consciousness (a receptacle which has never been filled), the drawings for the buildings which we know only too well. These are often conveniently devised with excellent workmanship on good material, full of drawings, but innocent of any claims to consideration as architecture.

Again, these men at the boards must have originated the ugly and elaborate ways of carrying out simple details, which have become the stock-in-trade of the artisan to-day. If they had only spent a few days in the nearest village and then given a few minutes verbal instruction or demonstration to the workmen, how much better a lot of this work might have been. Is not the great advance in domestic work largely due to the adoption of this policy, and to the realization that there are bricks and bricks, and that every locality has its characteristic manner of building.

Once the Renaissance was established, it seems that elaborately detailed drawings became unnecessary, and the workmen could be trusted to produce the vernacular 17th and 18th century work, of which the charm is now generally admitted, and of which the American Colonists made such good use. But with the 19th century, with its chaos in matters artistic, the luckless workman found himself called upon to execute work in the manner of half-a-dozen centuries, in many countries, in as few days. The most precise information in the form of drawings became necessary, and has continued so ever since. Now it is not that architecture suffered from too much drawing (I think that is impossible), but rather from drawing misapplied, that is there was, and still is in some quarters, too much drawing in the design, and not enough drawing *of it*. If eighty per cent. of the drawing put into the average commercial, competition, or domestic designs of last century, and more recently, had taken the form of the tracing paper refining furnace, and numerous perspective studies from every point of view, might we not have been spared from the senseless choppings and blockings, trouser panels, and the ubiquitious swag which disfigure so many of these buildings?

TECHNIQUE AND THE MACHINERY OF DRAWING.

In deciding the manner in which a drawing is to be executed it is very necessary to distinguish between the difference in function of what I will call "study drawings" and working drawings, which are respecting, suggestive and explicit. One occasionally sees working drawings decked up with shadows, etc., and I am afraid also so called working drawings are sometimes, to say the least, sketchy. The result is unsuccessful in either case. It should be evident that no working drawing for a successful piece of work can be produced without the previous preparation of exhaustive study drawings.

In addition to mere manual skill the production of an architectural drawing, in any manner, of course necessitates a thorough knowledge of materials, the forms which the draughtsman expresses being determined not by caprice, but by the functions of parts and properties of materials, although these are secondary to the question of expressiveness of form. In the use of decorative materials, the necessity for beauty of form decreases as their decorative value increases.

As mediums we have the pen for line work, the brush for wash in monochrome and colour, and the pencil, probably the most useful all round instrument for delineation, capable of giving a marvellous range of effects from delicacy equal to a silver point to the sparkle of "slashy" pen and ink work. The coloured pencil and chalk too, is an undeservedly neglected medium. We shall recall the works of Mallows, J. B. Fulton and Robert Atkinson as showing mastery of the pencil in distinctive ways.

As other examples of line work, we have woodcuts such as Düreis and the works of the great etchers.

The value of line in any type of drawing can hardly be exaggerated, but engravings excepted its use alone should be reserved for working drawings (which, by the by, we may flatter ourselves have attained a degree of excellence in recent years, and even show signs of being caried too far). Although the delicate line perspectives which we associate with Laterouilly and his contemporaries, in which the effect of distance is increased by the thinning of the receding lines, are very charming, the method is too laboured and lacking realistic effect for us to desire its revival.

Pen and ink work, necessitating the adoption of a somewhat rigid convention, allows of more easily acquired perfection with these limits, while with a medium allowing a broader manner, success, though more difficult, will be the greater accomplishment.

As systems we have direct or orthographic projection, isometric projection and perspective. The value of the first two-dimensional system may be increased, from the descriptive point of view, by the employment of sciography, the neglect of which during a few generations was not justified by the contemporary standard in design and which we are all glad now to see revived.

The practice of indicating shadows seems to have ceased during the Gothic revival, while in exchange we adopted the thick-line and Oxford Frame manner. I think we may congratulate ourselves on the passing of these fashions, which sacrificed a lot of refinement and feeling for detail and is responsible for much coarse and vulgar design.

Isometric projection is a valuable system, combining the effect of perspective to some extent, with the added advantage of the possibility of reading to scale in three dimensions from the single drawing.

Now, although there is promise of improvement in design through the revival of delicately drawn and shadowed and rendered elevational drawings, I hope that we shall not forget our perspective. The English School has always been strong in perspective and the system always must be unrivalled for the realistic representation of solid forms. To me it is astonishing that the rules of perspective remained undiscovered so long and that the uninitiated still find it easier to draw objects in plan and elevation, *i.e.*, as they are, than in perspective, *i.e.*, as they always have and always will actually see them.

Probably the most descriptive way of presenting any project to the lay mind is by means of the bird's eye view.

In no discussion of drawing can mention of "the Orders" be omitted. We must all be glad to see these models of proportion stripped of the senseless arithmetical fog which so long blinded our youth, to their beauty. But the Rheumatism inflicted by Palladio and others is being massaged away so that they may regain their pristine flexibility and grace.

As to sketching, it is difficult to say whether sketching helps the study of perspective or the study of perspective helps sketching most; probably the honours are easy. But it is much easier to see how a line goes if we know how it should go.

Again, the student in arranging his drawings on the sheet and in determining the character and weight of lettering, etc., obtains valuable training in the all important subjects of balance and proportion and fitness of feature to position, composition.

I have referred to the advantages which may be expected to result when drawing becomes a subject of general culture, and it seems desirable to consider how its study may be made easier—how the machinery may be simplified—for the simpler the machinery and the more easily mastered, the more servicable of course is the machine.

Tracing and copying are valuable means. Tracing while ensuring a certain degree of success and corresponding encouragement allows the whole of the attention to be concentrated on the subject and quality of line, and is, therefore, of the greatest value in the early stages of instruction. Although, it is possible to crawl along the lines thinking of something else, the student will soon find that he is able to impart character to his tracing which may even turn out better than the original.

Other useful aids in copying, enlarging, and reducing are, squaring (by which a task too difficult to be tackled as a whole may be split up into a hundred parts, each easily dealt with), the pentagraph and camera lucida, useful instruments, which have the advantage of requiring something more than mere manual dexterity to manipulate. Whilst as an elementary training in the realization of solid forms and the relation of parts, exercises in "graphical discussion" prove excellent.

I do not propose to burden you with details of materials and their manipulation and questions of technique, which are rather matters for demonstration than description, and will, therefore, conclude by putting before you a series of slides, chosen primarily for the various manners of draughtsmanship they exhibit, but which I hope may also be of interest to you on account of the subjects they represent.

Discussion.

Mr. Stanley Salisbury in proposing a vote of thanks to the lecturer said that on first thoughts he had imagined that Mr. Wilkinson's paper would have dealt with expressiveness rather than the representation of form. The remarks made as to the value of drawing studies as a means of educating the reader and author were excellent, and if generally adopted would no doubt lead to a greater expressiveness in the forms given to their buildings. There was a little confusion in their minds as to what was meant by expressiveness of form as the term was somewhat loosely applied. There was the direct expression and the indirect. Certain symbols used in their buildings were sometimes spoken of as though each was a means of artistic expression. An indirect expression due to association or assigned meaning rather than expression of form.

Mr. G. A. T. Middleton, a.r.i.b.a. (Past Vice-President), in seconding the vote of thanks referred to the fine series of drawings which had been shown upon the screen and the pleasure which those Members unable to be present had missed. Mr. Wilkinson had gone to considerable trouble to bring his excellent series of slides together, and their exhibition had proved to be of the greatest value, perhaps of more value than the actual written paper; which agreed entirely with the lecturer's own contention that drawing as an expression of form was of more importance than the written description. Every architect would recognize that he might draw in many different styles or media, but before all else he must draw thoroughly well. It was a little out of date to suggest that drawing was not now being properly taught to the general public. It might have been true twenty or thirty years ago, but now that it was receiving its due attention in the schools, he was very hopeful for future results. He would very much like to see Mr. Wilkinson's suggestion carried out for the use of tracing paper for elementary drawings other than architectural. The use of tracing paper amongst architects was almost universal, but it is difficult to get clients to understand that in order to produce good things they as architects must keep on making study after study on tracing paper, of which the majority must ultimately be thrown away. Many clients imagined that architects produced their designs at a moment's notice as perfect things, whereas it was only by continually producing these studies that in course of much time they acquired the facility of designing rapidly when the need arose.

Mr. Ellis Marsland (Past Hon. Secretary), in supporting the vote of thanks said that the paper showed the necessity for all who were engaged in building to have a good knowledge of drawing. He suffered very much from people who came to him with a few scratches on paper which they were pleased to call drawings, and which conveyed nothing to his mind as to what they wanted. Then there was another type which endeavoured to demonstrate what was required by the point of an umbrella on the floor. In addition to reading, writing and arithmetic, drawing should be one of the subjects taught at all schools, and especially in those schools in any way connected with building.

Mr. Herbert Freyberg, F.S.I. (Member), said he felt rather inclined to differ from the previous speakers in-as-much as he feared that if everyone were taught Architectural Drawing, their clients instead of going to an architect in the first instance would probably get in a mess with the builder, and then call in a professional adviser to help them out, a course which did no credit to anyone. With regard to tracing as an educational exercise, one great hindrance to the younger draughtsmen in their studies was the practice of sending out drawings to be sun printed instead of being handed over to the younger draughtsmen to be hand copied. He had listened with a great deal of pleasure to Mr. Wilkinson's paper, and enjoyed his fine selection of slides.

Mr. Noel D. Sheffield (Member of Council), remarked that he had heard it said that architecture would not progress until the public was shocked. He thought the public was not, and never would be shocked. The great mass of them were he thought, uncultured, and those who were not had so many varying interests that they had no time to devote to architecture. The literary man with a rare taste for books turned up his nose at it for instance, and while he was content to live in a room furnished with some of the worst products of the world, pointed the finger of scorn at the architect for not appreciating his own works. An architect would ignore the works of the great masters of music, but would listen with pleasure to the ditties of modern musical comedy. It required, he thought, a certain amount of ugliness for a proper appreciation of beauty. If all their architectural work was beautiful it would only mean another course of levelling up. The Swiss peasant failed to appreciate the reason why tourists continually poured into his country, simply because never having left his own country, he had never known a foil to its beauty. Very few architects made a fortune by their own efforts, and much time and money were spent in the production of modern working drawings. What was wanted, he thought, was an architectural shorthand.

The President in putting the vote of thanks to the meeting said the paper had given them a great deal to think about, and it seemed to show very clearly that Mr. Wilkinson was a great advocate for the methods of teaching Architecture adopted at the Beaux Arts Atelier which the Society had been instrumental in starting recently in Wells Mews, off Oxford Street.

The vote was then carried with acclamation.

Mr. Leslie Wilkinson, in reply thanked the Meeting for the reception accorded his paper, and said he was glad to hear that drawing was now being more adequately dealt with in the schools. He was rather thinking of those men one came across so frequently who could not realize the necessity for making a section agree with plan and elevation, and who continued to tell the most graphic lies. With regard to Mr. Sheffield's remarks concerning the levelling up of the profession, he would be very glad to be alive when their best work at the present day was the ugliest, and he protested against the suggestion that architects generally were not appreciative of the best in music and the other arts.

The New President N. and D. A. S.

Mr. Harry Gill, of Nottingham, a member of the Council of The Society of Architects, has been unanimously elected President of the Nottingham and Derby Architectural Society. Mr. Gill has been for long an active member of that body, and has filled the office of Vice-President with distinction for two years in succession. His election to the Chair is a further proof, if any were needed, of the esteem in which he is held by his colleagues, and is a suitable recognition of his past services. We anticipate for Mr. Gill and the Society over which he is called to preside a very harmonious and successful session.

Some Arbitration Problems.

How to Reduce the Costs.

The Builder commenting on the interesting paper by Mr. Valentine Ball,* on the legal position of arbitrators and arbitration, says it touches in a more or less complete form many of the problems which the builders and engineers of the present day have to face when disputes arise in the conduct of their business. Nor is there any doubt that the arbitration clauses inserted in the building and engineering contracts in the R.I.B.A. and other forms are extensively and advantageously used and are responsible for a great deal of the falling off in the legal work on the King's Bench side of the Law Courts. In many ways arbitration presents great attractions to the commercial man. He does not run the risk of figuring in the Press as a target for forensic wit. The proceedings are of a private nature. His case can be fixed for a given date instead of being left to the exigencies of the Law Court's list. If when fixed it is found to be inconvenient to proceed an adjournment is much more easily arranged. Furthermore, in any case where there are details requiring the special knowledge of a skilled expert and lengthy investigation arbitration undoubtedly provides a more suitable tribunal than a court of justice. On the other hand, arbitration has yet to be made a cheap form of redress. The case of *Mason and Lovat,* 23 T.L.R. 486, quoted by Mr. Ball, illustrates perhaps its weakest point. The litigant in the Courts, however much he may abuse them, is not called upon to pay the judge's salary. In the case quoted, however, he had to pay the arbitrator's fees to the tune of £527 10*s*., and this amount was subsequently approved by the Court. It should be remembered, too, that the arbitrator's fees have to be paid in addition to the fees of counsel and solicitors, charged on the same lines as would be paid in litigation before a judge of a similar character. The older custom of appointing an arbitrator on each side and then allowing them to select an umpire was still more disadvantageous to the suitor from the point of view of expense, in that here the unsuccessful party was called upon to pay the fees of both arbitrators and the umpire, as well as the other legal expenses of the case.

ECONOMICAL ARBITRATION.

Those referring matters to arbitration will therefore do well, as is suggested, to give their serious attention to the question of expense. As things go nowadays builders do not perhaps often dispute an architect's ruling except in matters of serious moment upon which it is worth while to incur substantial expense. There are, however, many minor questions as regards which some County Court scale of arbitration, so to speak, might be advantageously introduced. It is true that men of high reputation will always demand for their time what it is worth in the open market in whatever capacity they are asked to act, but there are many quite capable arbitrators less known to the world " wasting their fragrance on the desert air." Nor would there be in most cases any difficulty in securing competent men at much lower fees than those which now it is customary to pay. The outcry that efficient justice could not be cheaply procured was extensively raised when the County Court jurisdiction was first introduced into the kingdom, but it has been proved to be entirely without foundation. Perhaps the strongest proof of this is the almost entire disuse of the writ of certiorari, a writ which enables a litigant in the County Court where any specially difficult question of law is involved to apply for the removal of his case to the High Court for the purpose of having it tried. Such applications now are so rare as to be almost unknown. As a matter of fact the points of law which occur in the County Court are just as involved and technical as those which arise in higher legal circles ; and it is not an unusual thing after an appeal has run the course of the Courts to find a County Court judge's decision sustained in the end by the House of Lords. It has, in fact, been clearly proved that justice can be obtained and is obtained in the County Courts in the most complicated and difficult matters at an outside cost to the unsuccessful litigant of something under £100—that is assuming him to have to pay his own and his opponent's costs as well, evidence and all. It is surely therefore a matter well worth the consideration of the councils of the various bodies connected with the great constructional trades whether some corresponding scale cannot be evolved as regards the costs of arbitration, at any rate, as regards less important matters, so as to give the conveniences of arbitration a wider currency.—*The Builder*.

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* **Read before the Society on April 16th and reported in *The Builder* on the 17th.**

The Irish Builder and Engineer, in the course of a leading article on Mr. Ball's paper says, it is popularly supposed that arbitration is a cheap method of settling differences ; in point of fact it is very costly, much more so than an ordinary action-at-law. Usually two arbitrators, with power to appoint an umpire, are nominated, and either sit together, or, as the arbitrators nearly always disagree, they become amateur advocates, leaving the decision to the umpire. If the case is of any serious importance, it is invariably prepared by solicitors, briefs drawn up, and as one or other of the parties usually insists upon retaining counsel, the other must follow suit. Assuming, then, the case to involve a substantial amount, there are three judges at from five to ten guineas (the umpire usually expecting a higher fee than the others) per day each, in addition to retainers, if the case is a big one ; Senior and Junior Counsel, who receive substantial fees on their briefs, together with daily " refreshers," and the usual fees on " advice for proof." In short, all the usual procedure and preliminaries to the trial of a law action are fulfilled. If the case involve many technical points relating to "extras" or some other contentious questions, expert witnesses are invariably employed to give evidence, and not without expense. The contradictory and lengthy testimony, the technicalities of the points, ill-understood by counsel; the entire disregard of the laws of evidence, all tend to prolong the case. The arbitrators, if they have not developed into absolute advocates, are not possessed of legal training, nor are their minds filled with that judicial sense so characteristic of our judges, they permit the evidence to travel far wide of the point at issue, allowing examination, cross-examination, or procedure, that would not be tolerated for an instant in a court of law. It may all tend to the better elucidation of the case, but it is doubtful, and certainly horribly expensive; decidedly more so than an ordinary action at law.

Some Objections to Arbitration.

Without, for one moment, imputing to any single person engaged a desire to prolong the costly proceedings, it will readily be seen that it is not the pressing interest of any one, except the litigants, to shorten the proceedings, and we find it is not uncommon for an important case to drag on at arbitration for a month, when it would be tolerably safe to say a judge, or a judge and jury would have disposed of it in a week at most, meting out justice, rough and ready perhaps on technical points, but still justice, and much less liable to be assailed by the unsuccessful litigant; in other words, more final.

Then again, lay arbitrators, apart from the latitude they allow at their enquiries, owing to want of legal knowledge, frequently travel far outside the scope of the reference, deciding questions never referred to them, running the grave risk of making the whole costly award bad in law, easily upset on application to the courts. The entire proceedings being then abortive, must be begun *de novo*, or as sometimes happens, ultimately settled by the courts.

Then again, some disputes arise on the legal construction of a contract. When it is being drawn and executed the two parties to it are, or think they are, very clear as to its intent and meaning, but after the lapse of, say, four or five years, or even much less, when their respective visions have become tinged by the powerful influence of £ s. d., they are bona-fide decidedly less clear and reliable in their views of what a given clause, if it is not couched in the most lucid language, really means. But as the arbitrators are usually lay men with little or no knowledge of legal draftsmanship or its interpretation they are hardly a very satisfactory tribunal for the ultimate solution and determination of so delicate a legal point.

If the question at issue really arises out of the construction of the contract, then it ought to be decided upon the true legal construction of the words, which after all only means the common-sense English of it as it appears to minds trained in the interpretation of such forms of words.

SUGGESTIONS FOR A REMEDY.

These, then, are some of the objections to arbitration. How are they to be remedied? Frankly, we do not know; but there are a few points that arise, and which, we think, afford some basis for arriving at a better and cheaper method.

First of all, we may say that we yield to no one in a keen anxiety to avoid the pitfalls of the law and its proverbial uncertainty. Sensible men do well to avoid it, and to make great sacrifice to do so, but having said so much, we think there is sometimes an unreasonable dread of the consequences of putting matters to the test, and clinging to arbitration as a floating straw, in order to avoid it. The result is not always satisfactory to those concerned. We have heard a learned and common-sense judge say that the cheapest arbitration is by a judge and twelve jurymen—and there is a good deal in it.

We have always held that, if the trial of legal actions arising out of building contracts could, in some way, be cheapened and simplified, it would be a great advantage, and we have strongly urged the appointment of an official technical referee or assessor in connection with the High Courts, who should be an architect of skill and long practical experience, but not engaged in professional practice, or at all events not in the district where the case arose; it might not be practicable to retain such a person as a whole-time officer of the Court, owing to the small number of such cases in the Irish courts, but such an official could always be had recourse to by the court in the event of any technical difficulty arising, and purely technical points might be wholly referred to him for decision.

This procedure seems to us the cheapest and soundest way of settling disputes, of such a nature as the contractor might object to leave to the sole determination of the architect; giving him the relief he desires without the costly expedient of arbitration as it usually works out.

It must, however, be remembered that the elevation of the architect to a quasi-judicial position in respect of certain matters is not his own handiwork, but is the creation of successive generations of lawyers, and has been devised for the mutual convenience of the parties, and for the necessary reasonable protection of the employer. It is almost essential in a large contract, if chaos is to be avoided, that some one person shall possess arbitrary powers, in certain matters at all events. An honest architect sometimes, too, has to protect the contractor against an unreasonable client. We think that, at all events, an architect should be capable and honest enough to fulfil fairly the duty of deciding if materials are in accordance with the contract or not; if he is not, then he is not fit to be an architect.

Another method of dealing with the matter would be to leave everything in the contract to the judgment of the architect, but qualifying it by saying to the "*reasonable* satisfaction of the architect." This would enable the contractor to immediately get relief from the courts, if the judgment were exercised in a biassed or unreasonable manner. But it would be a rather loose and possibly, from the employer's standpoint, dangerous way. On the other hand, a court of law is a very unsatisfactory tribunal to settle a purely technical point, such as the quality of materials.

Another method of providing for settling disputes on certain specific points would be to draft the clauses relating thereto so that they might be without prejudice to the contractor's right to obtain the decision of the courts thereon. And certainly in the case of a complicated legal instrument, like a building contract, if any doubt arises as to the legal interpretation of the contract, a fruitful cause of disputes, there would be little advantage in referring such a point to the arbitration of laymen. It ought at once, if it be of such a nature as to admit of that course, be submitted to the ruling of judge of the High Court, which we believe we are correct in saying can be done under the Rules and Orders of the Supreme Court of Judicature in Ireland, or failing that, to the arbitration of a counsel of special skill and experience in the law of contracts. One would not have recourse to a lawyer for medical advice; why should one on a legal matter go to a layman for a decision, with the almost positive certainty that such decision is bound to be upset, if one or other of the parties takes exception to it.

DISADVANTAGES IN IRELAND.

In Ireland we are placed at a very great disadvantage, because the Arbitration Act of 1878 does not apply to this country. This Act greatly facilitates arbitration, minimising one great objection to it, namely, the ever present danger that the whole costly proceedings may be rendered abortive by reason of legal flaws in the procedure or in the award. It gives the parties or the arbitrators ready access to the courts for guidance, in the event of any legal difficulty arising enabling an authoritative decision thereon to be had before the arbitration proceeds any further, or any more time and money is wasted. In Ireland we have to wait until the award is made, and then having taken it up, and paid all the heavy costs on it first, if we don't like it and are advised that it is bad in law, as perhaps we knew beforehand it would be, we have to go to the courts to get it set aside. If we fail in this we have lost more money—if we succeed we are both exactly as we were before we started, except that one of us is minus a very substantial sum of money.

These are some of the pros and cons of an arbitration clause in a building contract. The principle of it, as we have said, is an excellent one, the objections lie in the difficulty of applying it readily and cheaply, and without abuse. Where two men are still on good personal terms, but have an honest difference of opinion, to refer that difference to the arbitration of a third party is an ideal way out, but when relations have become strained, and the questions involved, it is less so.

FATAL AMBIGUITIES.

In actual practice, smooth working and absence of friction are greatly helped by a well-drawn agreement, the clarity of its classes such that no man, legal or lay, can fail to thoroughly understand them, which, of course, implies an entire absence of ambiguity. This quality is wholly lacking, as Mr. Ball points out, in the arbitration clause of the Conditions of Contract of the Royal Institute of British Architects, which he says is "*not easy to understand*, and various interesting questions arise with regard to it," a lawyer's way of saying it is ambiguous, and may be argued in every conceivable way, affording great scope and employment for legal talent.

In fact, the whole Conditions of Contract of the Royal Institute and the Irish Institute, as we have before pointed out, are objectionable on this score. Take, for instance, the clause in the Irish Conditions of Contract, relating to the Clerk of Works, presumably those who drafted it know what it means ; no one else does, and the wording of the clause is of little assistance in forming an opinion on the conundrum presented. So, too, in an aggravated degree, with the clause in which reference is made to a building being "practically complete," for it raises a very serious point. The plain English of the word "practical" means to do in a practical manner, not merely theoretically—which applied to a building would be equivalent to saying it was thoroughly or entirely finished—but the context of the words in this clause, leaves it rather open to doubt. The word is sometimes used in common speech as meaning "almost," which we think is rather a misuse ; it is probably in this sense that it is intended in the clause referred to, but it is not entirely apparent. In any case it is almost impossible to define when a building is "nearly" or "almost" completed. There is no standard, legal or architectural, by which it can be defined or measured. Such ambiguities as these are fatal blemishes in a legal instrument.

No legal document that the art of man has drawn is perfect, but the operation of skilled legal minds, brought to bear upon problems clearly put before them, can go as near perfection in respect of clarity as can be hoped for.

Bricks and Brickmaking.

The very able paper recently read by Mr. Arthur E. Brown, B.Sc., before The Society of Architects, which, says the *British Clayworker*, we reproduced in our issue of March last, was followed by a discussion which was crowded out of our April issue, but is much too interesting to lose. In addition to members of The Society of Architects, several brickmakers, whose names are familiar to our readers, will be found to have taken part in the discussion.

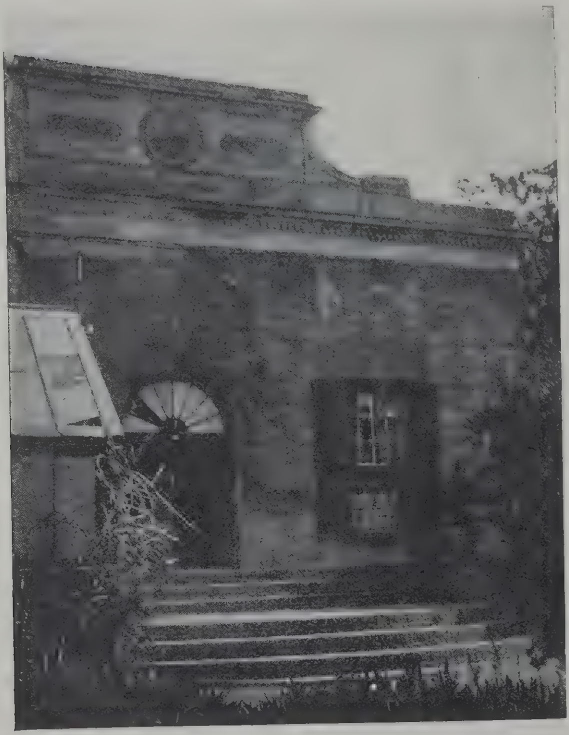
Saasveld.

The Home of the van Oudtshoorns.

A SHORT distance along Kloof Street, Capetown, on its left-hand side, one comes to an old Dutch residence, somewhat dilapidated and showing marks of the ruthlessness of wind and weather when extended over a long period of time. This is Saasveld. It is a single storied building, and was erected by William Ferdinand van Reede van Oudtshoorn, somewhere about the year 1780.

The building is of interest to the Archæologist and to the Architect, as it illustrates the style of architecture which was in vogue at that date.

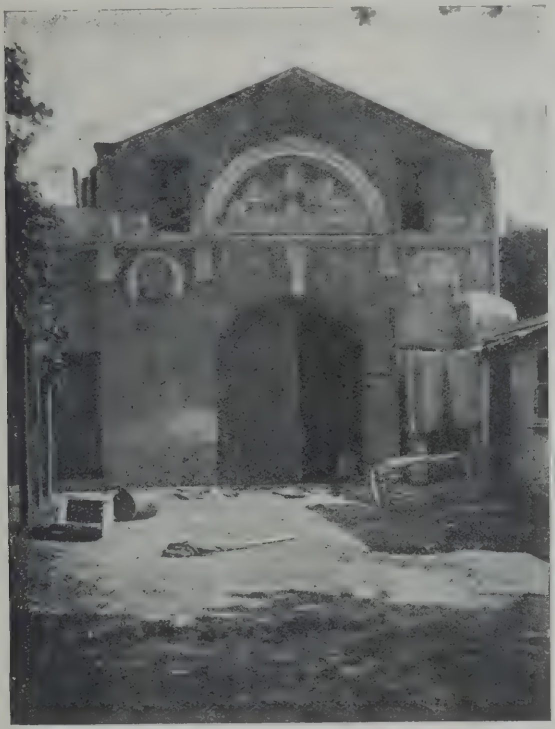
From an examination of other buildings erected in Capetown at about that date we know that the original door and windows must have been removed and replaced by more modern ones; but the cornice, etc., and the Dutch clinker brick steps leading to the " stoep " are typical, as is also the decorations over the windows. No doubt a similar decoration existed at one time over the door, but has disappeared.



Originally the homestead stood lonely in an extensive estate, on the hill slope leading up to the Kloof, and was surrounded by vineyards, gardens and groves of trees, but by degrees this expanse has been curtailed, and now its area is very much less, while the building has become surrounded by various outbuildings, so that it is almost impossible to make out the original plan.

As in all buildings erected by the Dutch in South Africa, simplicity was the end aimed at; and it is this simplicity which creates such a contrast between these buildings and others of later date, and which appeals to one's artistic taste. However, ornament was not forgotten, as can be seen in the dentils, swags, etc., although the design was somewhat crude.

Along the side of the building facing the street is an ancient vine trellis, and this leads one to a building used as a stable and coach house. A very plain gable has been decorated by means of a cornice across it above the door, with supporting triglyphs; on each side is a circular plaque with a broken wreath of oak leaves thrown over it; while the upper part of the gable, between the windows, is decorated by a moulded arch enclosing a design consisting of a burning lamp, an ornamental beaker and a plate, interwoven by swags of leaves.

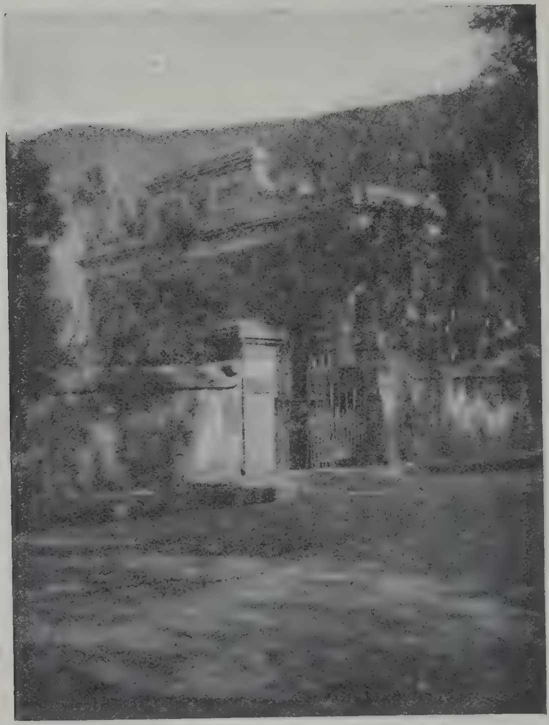


All the enriched work and the cornice are white, but the wall surfaces are yellow. The two windows are, without doubt, the original ones, and illustrate the small panes of the period; the door opening and door are also those put in originally.

At that time Kloof Street was a lane leading from the town to the slopes of Table Mountain; scattered over the slopes of this mountain were a few homesteads, and this lane with the one from Buitenkant, were the only means of reaching them. The wall along this lane and the gateway are, doubtless, those now existing; the gates are of wrought-iron, and, if not very ornate, are typical of the period. Some distance from the house, in Faure Street, is the family vault; it is so jammed in between high walls of surrounding properties, that it is impossible to obtain a satisfactory view of it; it is built of masonry, but is in a very dilapidated condition.

At the time the house was built this vault was at the corner of the estate, but now they are separated by several streets. The stream which flows under Queen Victoria Street, at one time flowed through the centre of the Saasveld estate, but now the confines of the property have shrunk so, as to be completely away from the course of the stream.

William F. van R. van Oudtshoorn, who had the house built, was born in 1755, and died in 1822; his son Jacobus Johannes Gybertus, was born in 1796, and occupied the old homestead; he married the daughter of Mr. W. S. van Ryneveld, President of the old Court of Justice. These two were the ancestors of the present Colonial van Oudtshoorns.*



What makes a consideration of this building so interesting now, is the fact that it is being converted into a Girls' School; to do this will necessitate demolishing the old coach-house with its decorated gable, but the facade of the main building will be preserved. For all that, the general character and appearance of the building as a whole must be considerably changed, as the additions will consist of a large double storied wing, and must, perforce, be out of keeping with the single storied homestead.

Alf. Howard, M.S.A.

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* Vide, Spencer Todd.

Reviews.

Perspective made Easy by means of Stereoscopic Diagrams. By Charles E. Benham. Price, 6*s.* 2*d.*, post free. Benham & Co., Colchester.

It is a clever idea to prepare a series of diagrams to illustrate the principles of perspective as a branch of solid geometry by utilizing the stereoscope. Whether, except as an exercise of ingenuity, it is worth doing is another thing, for perspective is not an abstruse science nor difficult of explanation to persons of average intellect without any more machinery than the simplest of extemporized models would provide ; and Mr. Benham gives no hint in his text of his reasons for doing this thing, and omits the Preface which is customary when an author has a novelty to explain. But what he has done has been well done, and must have taken a lot of trouble in the doing. Perhaps an architect might be tempted to say that in other respects his methods are old-fashioned, for nobody who prepares perspectives from plans would ever think of using measuring points—many who do so might even be ignorant of their use—preferring to adopt the system of direct projection ; and he might think that the suggested angle of vision is too great, both vertically and horizontally (a photographer would surely do so) ; but at least the elements of the subject are, if the stereoscope be actually employed, so clearly illustrated as to make misunderstanding well-nigh impossible.

The Evolution of Architectural Ornament. By G. A. T. Middleton, A.R.I.B.A., M.S.A. London : Francis Griffiths, 34, Maiden Lane, W.C. Price, One Guinea.

This volume adds another interesting chapter to a most engrossing period of architectural development, so far as its ornamental characteristics are concerned. The Author begins by dealing with the Anthemion and illustrates his ideas by specimens from Assyrian and Phœnician examples, not letting the subject go until the leaf enrichment of the vestibule at the Lady Chapel at Westminster Abbey is reached. In something over one hundred pages the author thus deals with the evolution of ornament during some three thousand years, and a comprehensive survey in so short a compass naturally militates against entering into many details during that most interesting period of the architectural history of the Western Hemisphere. Ruskin, may be said to be one of the first (at all events in modern times), to emphasize the fact that the real history of the people and their rulers during the time referred to was more truthfully embodied in their architecture than in their archives. This is particularly true with regard to the case of the ancient Romans, as wherever remains of their architectural or engineering construction are found the prevalent idea is the fact that such traces represent the triumph of the conqueror whether it be over the Athenian artist or the ground-down Gaul. The author spends much time very properly in tracing the development of the Athemion, or more familiarly speaking, the honeysuckle ornament, and also compares its development with the Fleur de lis as well as with the Acanthus. Possibly he had in his mind one of the Byzantine capitals of San Vitale at Ravenna, where all three are most beautifully interwoven. Such ancient ornaments as the egg and tongue, the dentil, the guilloche, the Greek key, etc., were in our opinion something more than a mere architectural ornament and really expressed a significant if hidden meaning. The book is illustrated with well-known examples from the palmy days of ancient Greece down to that perfect Renaissance example, the Church of the Miracoli at Venice, and all the drawings will be studied with much attention by those interested in this subject. The question as to how far the Comacine work of the sixth century influenced the sixteenth century strap work of Jacobean England, is raised by comparing figures 235 and 189, which is in effect comparing Alexandria and Hatfield. The author has produced a volume which should prove of great service to the enquiring student of architecture. Experience shows that not only are such books in great demand in at least one Public Library, but the study of similar works stimulates the reader to seek additional information in works of by-gone years, which otherwise might have passed unnoticed.

Architects' Responsibilities.

The Position in France.

At the recent annual meeting of the Queensland Institute a member spoke of the legal responsibilities of architects, and referred to the position in this respect of French architects.

The following statement from an authoritative source explains the state of the law in France. It will be remembered that the greater part of French building work is done by schedule rate contracts, not by the lump sum system familiar in Australia.

There is a general belief that the French architect is subject to a ten-year responsibility ; that for ten years he is responsible for and guarantees the stability and quality of his work. This is not wholly true. The responsibility of the architect is ruled by two articles of the Civil Code : Article 1792, which is commonly cited, and Article 2270, which is rarely remembered. Both specify ten years, but under different conditions. Article 1792 provides that if a building constructed under a fixed sum contract fails in whole or part by fault of construction, or by fault of foundation, the architect and the builder are responsible during ten years. Article 2270 provides that after ten years, the architect and the builder are discharged of all guarantees for works they have made or directed.

The application of Article 1792 is restricted to works by contract. The legislators had in mind the special nature of these contracts, and wished to ensure that owners of buildings should obtain substantial buildings. In these cases the failure of the work alone was enough to give the owner a claim ; and as it is necessary that all obligations should have a term, ten years was fixed as the period of responsibility. At the time this law was adopted the architect and the builder were frequently one person ; whence has arisen a legal confusion. With works not built under a lump sum contract there is a common law liability only. The architect, like other men, is responsible for his deeds and any damage those deeds may cause. Article 1382 of the Civil Code lays down the law that any man is responsible for any damage caused to others by his acts.

The law provides that claims under this article must be made within ten years.

The difference between these provisions is thus set forth : A building is constructed under a lump sum contract ; it collapses ; that is enough, if ten years have not elapsed, the architect is responsible, unless he can prove that the fault was not his. In the second case, a building is constructed on a schedule of prices ; it collapses. The owner, if he thinks the architect is at fault, can sue him ; but it is now the owner's place to prove that the fault was the architect's ; and his rights are limited to ten years.

In one case, the architect is responsible, unless he can prove otherwise; in the other case, the architect is responsible only when error is proved against him. In cases of lump sum contracts the law holds architect and builder jointly responsible; in schedule contracts each is responsible for himself alone.

When it becomes a question of apportioning responsibilities, these should depend on the duties of each. If the damage is the result of a fault of design, the author of the design is responsible; if the result of faulty construction, the responsibility may be divided. For example: Suppose some piers are required to carry a load of 300 kilos per square centimetre; no stone could carry such a load, this is a fault of design. Suppose a load of 50 kilos is shown; this is an extreme demand on the hardest stone; but this is not a fault of design, for the demand is practicable. But if the architect calls for a stone of insufficient strength, there is a fault of construction. But the builder is at fault also. He is not merely a merchant, he is a man of skill, and if he executes without protest, an imprudent order he takes his share of the risk. On the other hand faults of workmanship are the affair of the builder. Suppose a stone pier is rightly designed, but the stone is not of the kind specified, is badly cut, or badly laid, and the pier collapses. The fault is the builder's; the architect would be liable only for insufficient supervision, and in practice no supervision can be absolutely a protection.

The architect is also responsible for losses by his client by infractions of, for instance, by-laws, or breaches of the rights of neighbouring owners.

Finally the architect may be sometimes sued by a client for loss caused by want of skill, by faulty design, or careless management of the client's business. The client can only demand of the architect what the latter is capable of doing; the client must use his judgment when selecting an adviser.

The foregoing statements refer to civil liabilities; there are in certain possibilities criminal liabilities, when failures of buildings involve loss of life.

"There is, above all, the responsibility of the architect to himself and his conscience. This is a moral responsibility, a condition of free intelligence and dignity of life. The accused and the judge are here the man himself; the man is not worthy of the name if he do not accept responsibility for his deeds."—*The Salon.*

Lightning Conductors.

A Few First Principles.

Mr. Frederic H. Taylor, in a paper on this subject recently read before the Junior Institution of Engineers, says that briefly put, any lightning conductor system comprises: (1) The air terminal, consisting of what is called the "elevation rod," the top of which is provided with one, three, four, or even five points; (2) the conductor from the elevation rod to the ground, with branch conductors from other parts of the building or from the metal work of the structure, such as gutters, stack-pipes, metal roofing, etc.; and (3) the earth connection.

The metal most commonly—in fact, almost universally—used is copper, in the form of copper tape from, say, 1½ in. by ⅛ in. down to ½ in. by ⅛ in. Iron is electrically efficient, but is more subject to corrosion and not so easily fitted into position. As to the design of the conductor system, this can only be settled when the design of the building, including its chimneys, turrets, gables, ridges, roofing material, etc., are known, and some consideration must also be had for its general situation. For rough guidance, however, a few general first principles may here be given:—

1. Conductors should run in as direct a line to earth as possible. Some persons prefer to keep them a certain distance from the wall.
2. Vertical rods should preferably be connected by horizontal conductors fixed to ridges or other suitable parts.
3. Roof metal work, etc., should be connected to the system.
4. Chimneys should be protected as being specially liable to be struck, due of course to the column of hot gases, which are good conductors, the carbon lining to the chimney in the form of soot, and the mass of metal work at the base in the form of a stove.
5. Any joints in conductors should be both soldered and screwed together.
6. Conductors should be kept as much away from interior gas pipes or electric pipes, etc., as possible.
7. Similar metals should be used throughout, *i.e.*, the holdfasts should be of gunmetal and screws or rivets, etc., of copper.
8. Long runs along ridges, etc., should preferably have more than one elevation rod—say at least one at each end, several short points along a ridge being better than a few tall ones.

The earth connection of any lightning conductor system, however simple that system may be, is of the very utmost importance. It is the connection to earth, and if this be inefficient the whole system may be regarded more as a danger than as a protection. The matter of obtaining a good earth connection is mainly a question of surface contact between the conductor and moist earth. A moderate amount of resistance (ohmic resistance) is not harmful; in fact, may be otherwise. The mere fact of taking the conductor into moist earth, or even into water, does not necessarily form a good earth unless there is a considerable area of contact. The usual method of forming an earth connection is by means of a copper plate. There are, of course, cases which sometimes arise where to bury a copper plate in the ground is to invite certain failure. In the neighbourhood of certain factories the soil is found saturated with ammonia (tar or creosoting works, etc.), which is destructive to copper.

To facilitate discharge into the general mass of earth saw-teeth points to the plate are sometimes used. A special type of earthing plate adopted by the London County Council is to the following specification :—

> " To be of copper, $\frac{1}{16}$ S.W.G. tape, riveted and soldered the full length of the plate ; joints washed of acid and protected by thick coat of tar. Each plate to have four rows of triangular tongues formed out of the plate itself—two rows of six and two inner rows of five each, so that tips of tongues in adjacent rows point in opposite direction, each tongue being 3 in. long and tapering from 2 in. to a point. Tongues to be bent at right angles and to point upwards when the earth plates are laid in position."

The loose earth or wood charcoal to be filled in and well rammed on top of the plate.

The difficulty of keeping the earth connection moist is in most cases a very real one—of course if a pond, lake, or river, can be utilized it is excellent provided the plate is kept free from mechanical injury and that you do not one day find yourself with only the end of the tape left.

It not infrequently happens that the earth plate originally installed on a job has failed, and that for various reasons one cannot sink another. In this case a live water main makes an excellent and a lasting earth contact, care being taken, of course, that the connection between the tape and the pipe is properly made. Such connection will, of course, be external to the building.

Meetings and other Fixtures, 1914.

DATE.		TIME.	OCCASION.
JUNE	11th.	6.30 p.m.	Members' Meeting. Election of New Members and any other business.
JULY	31st.	6 ,,	Last day for depositing Quarterly Competition Drawings.
OCT.	1st.	4 ,,	Council Meeting to receive Nominations for House List.
,,	15th.	4 ,,	Committees and Council.
,,	,,	8 ,,	Members' Meeting. Presentation of Students' Prizes. End of Session.
,,	31st.	6 ,,	Last day for depositing Quarterly Competition Drawings.

Architectural Work in Cape Town.

In my report last August,* I gave certain figures in connection with the amount of School work carried out from the date of Union up to the 31st of March, 1913. In continuation thereof, I find that from that date until the end of the year, forty-seven new schools or additions, etc., thereto, were carried out, at a total cost of £138,216. On the 31st of December, work on thirty-two schools was in progress, representing a total outlay of £131,991.

The Public Works' Department commenced this year (1914), with a good show of work in progress. At the Alexandria Hospital, Maitland, A. B. Reid & Co. had a contract amounting to £87,000, and Mitchell & Mackie had a contract for additions to the Capetown Training Institute, amounting to £2,385. Tidswell & Goodman were building a new cottage for the Matron at the House of Correction, costs £995, and certain alterations were being effected to the Breakwater Convict Station. At Elsenberg three contracts had been entered into, namely, amounting on the aggregate to about £6,000.

All the foregoing are in the area bounded on the east by the range of mountains extending from Cape Hanglip, northwards; but work was also in progress in other parts of the Province, and although outside the limits of my jurisdiction as a Corresponding Member, I may be pardoned, if I mention the following amongst others :—Aliwal North Hospital, £4,458; Fort Beaufort Hospital, £4,088; Grahamstown Chronic Sick Hospital Infirmary, £5,795; Kimberley Hospital, £29,828; Ladysmith Hospital, £6,375; Montagu Public Offices, £2,854; Port Elizabeth Hospital, £53,765; Uitenhage Hospital, £1,713; Worcester Hospital, £5,300.

Tenders had been received for Barkly West Hospital additions; Kirstenbosch Botanical Gardens, House for Director; Stellenbosch Hospital additions; Somerset East Hospital; Umtata Hospital. Tenders had also been invited for three houses for the Staff at Elsenberg , buildings in connection with Valkenberg Asylum, at Oudemolen.

Apart from Government, a fair amount of work is being done by Cape Town Architects. Taking the list of Schools in progress, I find the names of Black & Fagg; Parker & Forsyth; Lyon & Fallon; and E. A. Cooke; all of Cape Town. In the country districts the names of Simpson & Bridgman, of Oudtshoorn, appear to several works; W. White Cooper, of Grahamstown, is also still in harness; while Mr. Vixseboxse, formerly of Capetown, is practicing at Oudtshoorn; and Mr. Greatbach, of Kimberley, is responsible for some of the buildings.

Capetown, *5th February*, 1914. A. G. HOWARD, M.S.A.

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* [See No. 71, Vol. VI., September, 1913.—ED.]

Town Planning Conferences.

The Society's Delegates.

The following have been appointed by the Council to represent the Society as its official delegates at the Town Planning Conferences organized by the National Housing and Town Planning Council and by the Institution of Municipal and County Engineers :—

National Housing and Town Planning Council.

LONDON, April 1st and 2nd, 1914 : Percy B. Tubbs, F.R.I.B.A., P.S.A., and A. Alban H. Scott, M.R.SAN.INST., Member of Council.

DERBY, April 23rd and 24th, 1914 : W. F. Wills and H. E. Matthews, Members.

MANCHESTER, May 14th and 15th, 1914 : A. J. Murgatroyd, PAST V.P.S.A., Local Hon. Secretary.

TUNBRIDGE WELLS, May 19th and 20th, 1914 : Walter Kirk.

HULL, May 21st and 22nd, 1914 : T. Beecroft Atkinson, Local Hon. Secretary.

GLASGOW, May 26th and 27th, 1914 : C. J. Halley.

Institution of Municipal and County Engineers.

CHELTENHAM, June 24th to 27th, 1914 : Thomas Overbury, M.R.SAN.INST., Local Hon. Secretary.

Town Planning Tour.

The first tour and congress in England of the International Garden Cities and Town Planning Association takes place next July.

Parties are being organized from Canada, the United States, Austria, France, Germany, Italy, Poland, Russia, and Spain. Papers dealing with phases of housing, town planning, and garden cities in these countries will be circulated beforehand so that the whole time of the sessions of the conference—which is to be strictly limited—may be employed in question and discussion. An excellent opportunity will be afforded of studying, at first hand, town planning and housing schemes in this country, and also of exchanging ideas with the principal town planners and garden city workers in other countries.

The price for the first part of the tour (July 9th to 18th) will be £10, and for the extension to Scotland from July 18th to 25th, £10. A very attractive programme has been arranged, particulars of which can be obtained at the offices of the Association, 3, Gray's Inn Place, W.C.

Frost Resistance of Building Stones.

The most reliable sources whence practical results of resistance have been obtained are the signs of weathering in stones under actual building conditions.

Where and when circumstances permit, it is best to submit the stone that is to be tested for several years to all the influences of weathering and then decide on the strength of the extent of exfoliation, cracks and rifts exhibited.

The methods of saturating a little cube with a solution of glauber salz and then freezing it is all very well in theory, but in practice there are several objections. In the first instance, the resistance which stone offers to the solution is very different to that offered to water. It is well known that water when freezing expands, and exerts an enormous pressure. Now, through the addition of the glauber salz this very tendency of the water is obviated and in fact reversed, for salt of any kind is conducive to contraction.

Water, therefore remains the only reliable means for testing the resistance of stone, but the cubes must not be entirely covered by water, as in that case the air contained in them has no means of escape ; they must be slowly immersed, so that the air can gradually escape as it is being replaced by water.

The water is warmed to a temperature of 16 to 20° C. and to ascertain the maximum saturation coefficient of the sample, which is weighed before and after saturation. If finally, after repeated weighing, the weight remains the same, it is assumed that the maximum point of saturation has been reached.

The samples so saturated are frozen for 5 hours in a temperature of 12 to 15° C., and then thawed again in distilled water under a temperature of + 15° C. This is repeated from 20 to 30 times. To obtain the necessary cold broken ice and freezing salt is used and the samples are then, without being dried, submitted to pressure in order to ascertain their crushing strength when frozen, which is compared with the stone when not frozen serves a basis for the resistance offered by calculating the relative frost resistance.

The lower the difference of the crushing strength before and after freezing, the smaller the exfoliation and the cracks, the greater the frost resistance. At first sight it seems plausible enough, but the frost resistance should increase correspondingly with the decrease in capacity of absorption, and that frost resistance is in an inverse ratio to the porosity of the stone.

Practical experience, however, proves the opposite. Soft and porous stone is held to be particularly frost-resisting, and hard and brittle stone with few and small pores of but small resistance. The reason, of course, is that with the softer stones the pores give way to the freezing pressure more easily, whereas in the harder ones the constant compact resistance offered conduces to exfoliage, cracks and rifts. The knowledge of the mineralogical components of a stone helps us to ascertain its weather-resisting qualities.

Very harmful additions are principally carbonate of lime, pyrites of iron and gypsum, and most desirable are consequently the most silicious stones.

The great importance attaching to whether or not there is any addition to the water is shown by the fact that basalt, under the influence of water loses 2 per cent. of its dry crushing strength whilst granite loses 8 per cent. It is proved that stone showing a high frost resistance, will also endure against water, but naturally, it must not be assumed that the addition of salt and other materials is superfluous, nor must we overlook the necessity of experimenting with the inclusion of various materials of different stone and their composition. The different methods of testing should not replace, but supplement and complete each other.—*The Stone Trades Journal.*

The £100 Cottage.

In a letter to the *Journal* last January (page 110 of that issue) Mr. T. Stewart Inglis, M.S.A., demonstrated the possibility of building a pair of cottages for £240 or £120 per house. He has now proved his assertion by erecting a pair of model cottages at Felbridge, by contract and in conformity with the Local Bye-Laws, for £112 each cottage. The accommodation comprises Living Room, Scullery, usual offices, and on the upper floor, three Bedrooms.

These cottages have been erected to prove that it is practicable, under existing conditions, to provide a well-constructed, healthy and comfortable home for about £100. Since their erection, further economies and improvements have been made in the plan, including the provision of a Bath, and another model pair, for which the builder has submitted a tender of £100 per cottage, is about to be erected on the adjoining site.

Registration and Trade Unionism.

Elsewhere in this issue,* says the *African Architect,* we publish the latest letter in a discussion appearing in the correspondence columns of *The Society of Architects' Journal* (London) on the subject of the proposed Architects' Act for South Africa. The writer of this letter avowing himself an advocate of Registration, objects to the introduction of " other issues " as an attempt " to legalise Trades Unionism and force its provisions on everyone following the architects' calling," and he cheerfully opines, " there is no doubt Parliament will do nothing of the kind. These gentlemen," he continues, " seem to think that Parliament will be ready to legalise an injustice because a majority of interested persons ask them."

To some people the phrase " Trades Unionism," applied to our proposed Registration Act, would sound the final knell of its rejection and abandonment. The phrase is associated with demagogic oratory, lock-outs and strikes. Anything more degrading to a dignified calling we cannot imagine, and in our mind's eye we already see our profession brought to the level of the labouring navvy and the hodman. Say " Trades Unionism," and, both in Parliament and profession, those who believe you will be ready to demolish the proposals so designated. Fortunately, before this demolishing, there will be a little time for argument.

Registration will tend to the exclusion of unqualified men from practice ; it will set up a minimum standard of professional education for those admitted to practice. " Here," say the opponents of the Act, " let us stop : your scale of charges, your schedule of unprofessional conduct, your powers to express the views of the majority of the profession, all your further provisions are quite other issues—in fact, Trades Unionism ! And, therefore, it is not in the public interest."

The fact of the matter is that without the introduction of these further issues a Registration Act will be useless, perhaps even dangerous, to the great majority of practising architects. Imagine a profession in which it would be legitimate to tender as to fees, to attempt by underhand means to supplant another professional man, or to advertise " a l'Americaine." There is really no registered profession in the British Empire which would tolerate such practices. All are vested with powers which give registration a value. Within the last two years, for instance, the British Medical Association—rightly or wrongly—fought certain provisions of Mr. Lloyd George's Insurance Act ; touting is put down by our Law Societies by means of action in the Courts, and so on. The majority in each profession has the right to speak and act as representing the views of that profession. It is easy to see that, were it not so, the action of a few selfish men would in each case soon rob that profession of its attractions as an honourable calling, and registration therein would cease to have any value.

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* See page 195 of the March *Journal.*—Ed.

We hold that it is in the public interest of South Africa that its Parliament shall adopt an Architects' Act such as will promote the growth within its borders of an architectural profession of high status and efficiency. Such an Act, vesting an Institute of South African Architects with the control of registration, professional education and research, and all powers of representation, discipline and benevolence, may possibly be blighted by the shibboleth cry of "Trade Unionism." But its adoption would assure conditions approximating to those obtaining under the guilds of architectural craftsmen in the most glorious and inspiring periods of architecture that the world has yet known. The "personal liberty" and "professional aims" to which such conditions would "legalise an injustice" must be of a kind which will not bear public scrutiny.

The first arrest by the California State Board of Architecture for illegal practice has occurred, says *The Building News,* and the case is now in Court. The State Board intends to make a thorough investigation of the architectural field, and will weed out all illegal practitioners. The attorney to the Commission has received instructions to proceed vigorously against all persons practising architecture without the necessary certificate issued by the State Board.

Registration by Charter.

The proposals of the R.I.B.A. Council are still under consideration by the general body of members, and it seems unlikely that they will be passed in their entirety as set out on page 269 of our last issue. The discussion is to be resumed on June 8th, and will probably concentrate on the question as to whether Licentiates are to be admitted to Corporate Membership of the Institute.

Personally, we do not think the present Corporate Members will consent to extend the privilege to a " dying " class who have no claim to special consideration, and who already have the same opportunity as anyone else of qualifying for Corporate Membership. The position at present appears to us to be that the Council of the Institute want to get the Licentiates into Corporate Membership, the other Fellows and Associates will not entertain the proposal, and the Licentiates themselves are indifferent.

Activity in Australia.

At the last meeting of the Royal Victorian Institute of Architects, held at 57, Swanston Street, Melbourne, a letter was read from The Society of Architects, London, drawing further attention to its proposed Bill on the Registration of Architects, and asking for support. The president of the institute, Mr. Anketell Henderson, reported that Registration was likely to take the foremost place in the aggressive work of the R.V.I.A. during the coming year. New Zealand had just succeeded in passing its Registration Bill, and the council had arranged that day to send a letter of congratulation to the Institute of Architects of New Zealand upon the subject. The Premier of New South Wales, Mr. Holman, was about to introduce a Bill into the Parliament of the mother State. Tasmania, in addition, was alive to the subject, and a measure was in preparation. Whether it would be a Government or a private proposal was not, he believed, quite settled. In his retiring address, Mr. Anketell Henderson said :—

" There is no doubt that Registration will be the feature of the year. I have not yet seen the proposals of the British Institute, but I have gone carefully through those of The Society of Architects (London). Briefly, the latter provide that a non-registered man shall (*a*) not be allowed to call himself an architect ; (*b*) not be allowed to sue for fees, and (*c*) no certificate given by him to a contractor would be valid. As to (*c*), it is obvious that the contractors would assist the registered men. In our proposals, we should, at least, add something equivalent to the Building Ordinances of Chicago, which provide that no permit shall be granted or plans approved unless signed and sealed by a licensed architect. This is subject to a provision excepting buildings of the domestic class, not more than two stories in height, or 1,250 square feet in area. These are, of course, rough suggestions, which I throw out for further consideration by members of the Institute."

Panama Pacific International Exposition.

Arrangements are being made for the Society to be officially represented at the Universal Exposition of the Arts and Sciences, to be held in the City of San Francisco, under the auspices of the Congress of the U.S.A., in 1915, to celebrate the completion of the Panama Canal.

Architecture and the L.G.B.

Considering how closely the administration of the Local Government Board is concerned with the improvement of our towns, and how important it is that its great influence over local authorities should be exercised with some appreciation of architectural considerations, it is only right and proper that the first appearance at a public dinner of the new President since his appointment should be at one organized by members of the profession of architecture. At The Society of Architects' annual dinner the speech of the Rt. Hon. Herbert Samuel, M.P., convinced his audience that he brings a keen intellect and a sympathetic understanding to bear on the duties of an office so intimately related to perhaps the most important architectural problems of the immediate future. This augurs well for the future, and we wish Mr. Samuel every success in his new sphere of public service.—*The Builder.*

The Employer and the Clerk of the Works.

A Question of Liability.

One question raised by the Clerks of Works' Deputation to the Society recently, was as to who was liable in the event of injury or fatality to the Clerk of the Works in the discharge of his duty. The Council are advised that an injured person can claim compensation either under Common Law, The Employers' Liability Act, or The Workman's Compensation Act, and that, therefore, the building owner should insure against this risk. The contract of service should be between the building owner and the Clerk of Works, and the architect should, in his own interests, make sure that he does not incur any liability in the event of the building owner becoming insolvent, or from any other cause.

From enquiries made of a leading Insurance Office, it appears that Clerks of Works whose remuneration does not exceed the rate of £250 per annum, would be insurable at a reasonable premium.

The London Building Acts.

THE TRIBUNAL OF APPEAL.

The Tribunal of Appeal constituted under the London Building Act, 1894, has made and the Lord Chancellor has approved of new regulations as to the procedure to be followed in cases of appeal to the Tribunal, the time and notice of appeal, and the fees to be paid by appellants and other parties (in substitution for the regulations of the 21st February, 1895).

These new regulations came into force on 23rd April, 1914, and a copy has been filed with the Society for reference.

The Demand for Capable Assistants.

Modesty forbids us publishing an unsolicited testimonial received from a grateful assistant, who recently secured a good appointment through the Society. The original is open for the inspection of the sceptical who may not have been so fortunate in their use of the Register. The fact remains that we are sometimes unable to supply the demand for capable assistants, particularly those who specialize in any branch, or who are good all-round men. We suggest that members who have vacancies to fill or who are seeking to " better " themselves might with advantage use one of their privileges more freely.

Prospects in British Columbia.

From communications received, we gather that architects are feeling the effects of the " slump " which is following the " boom " in land speculation. The day of the " get-rich-quick " land speculator appears to be over, at any rate for the present. Those who under more normal conditions would probably be " building up " the country are turning their attention to other ways of making a living. The craze for " sitting " on the land has reached such an extent in some districts that even in places far removed from cities the land has been cut up into town lots, too small for any other purpose than putting a house on. The consequence is that as at present no one will build, the land is idle, and the necessaries of life have increased in price. Such a state of things must do the country a considerable amount of harm, and architects are among the first to feel the effects of it. It would seem that the prospects for architects in Canada are not very promising at present, and that it is only those who can manage to hold on during the bad times who will eventually reap the benefit in the future.

Mainly about Members.

We regret to announce the following deaths:

Mr. Edwin Bowman, of Newcastle-upon-Tyne, on March 17th last.

The deceased member was articled to Messrs. Thompson & Dunn of the same City, where he subsequently commenced to practice, which he had carried on for nearly a quarter of a century. He had been a member of the Society for eighteen years.

Mr. George E. Bond, J.P., of Rochester, the Immediate Past President of the Society, on May 20th.

The late President commenced practice in the City of Rochester upwards of thirty years ago, and some of the principal buildings in the district were erected from his designs. These include the Town Hall and Municipal Buildings, Technical Institute, Free Library, Royal Sailors' Home, Masonic Club, Schools, Theatres, and numerous other public buildings in Chatham, and Schools and other buildings in Rochester. He was the Architect to a number of public bodies, and had an extensive and varied practice in the County of Kent. Mr. Bond was a J.P. for the City of Rochester, President of the Liberal Club, and a Trustee of the Savings Bank. He was also a prominent Freemason, and one of the founders of The Society of Architects Lodge, No. 3244.

He joined The Society of Architects in 1888, and for many years served on the Council, and was President for four years in succession. He was a ardent supporter of the Society's Registration policy, and was a most fluent exponent of his views, both in Committee and in public. It was during his Presidency that the negotiations between the Society and the Royal Institute took place in regard to Registration and Amalgamation. In these he took a very active part. Mr. Bond was also a Member of the Beaux Arts Committee, and a keen supporter of its work. By his death The Society of Architects loses the support of a Member who never spared himself in advancing its interests. He attended its meetings with great regularity even while suffering acutely from the complaint which afterwards proved fatal, and kept in touch with its work by correspondence almost to the last. Mr. Bond's death is not only a great loss to the Society, but to many of its Members, who will mourn the loss of a good friend.

The funeral took place on Saturday, May 23rd, at St. Margaret's Cemetery, Rochester.

The name of Mr. A. Y. Mayell, of Westbourne Grove, has been added to the Commission of the Peace for the County of London.

The partnership subsisting between Messrs. Bannan & Rowe, of 8, Philpot Lane, E.C., has been dissolved by mutual consent. Mr. Henry Watkins Bannan will continue to practise as an architect and surveyor, and Mr. Gilbert Charles Rowe as a surveyor, at the same address.

Mr. E. Coath Adams (Plymouth) has just retired from the Presidential Chair of the Devon and Exeter Architectural Society, which he has so ably occupied for two years. The new Vice-President is Mr. C. Cheverton (Devonport), and Mr. A. J. Cornelius (Truro) has been elected on the Council.

Mr. Arthur Stockwell, 11, Pilgrim Street, Newcastle-upon-Tyne, is the Architect for the New Deansgate Picture Palace and Rendezvous Tea Rooms, Deansgate, Manchester; also for the New Picture Hall in Morley Street, Bradford. He has also designed the proposed Picture Palace in John Bright Street, Birmingham, and has been instructed by the Trustees of the Shipley Bequest to design the Shipley Art Gallery, which is to be erected in Prince Consort Road, Gateshead.

At Treven, near Tintagel, a new Council School has been built of local stone, and roofed with Delabole slate. The interior walls are smooth-plastered and distempered, while the exterior walls are finished with roughcast. Provision is made for 149 children, the building being divided into a main room with a sliding screen, classroom, infants' room, cloak rooms, and offices. The building cost about £2,000. Mr. B. C. Andrew, of St. Austell, was the architect.

The new Infants' School at Knutton, has been planned with a central marching hall, lighted and ventilated from the top and side. On three sides of the hall are grouped four classrooms. The front, or fourth, side of the square comprises a heating vault, over which are cloakroom and lavatories, and on the first floor is a teachers' room with inter-oven grate and lavatory and store adjoining. The seating accommodation is for 200, and the cost has been £2,148 14*s*., including site. The plans were prepared by Mr. W. F. Slater, architect to the Education Committee.

Pembroke Buildings, Cambrian Place, Swansea, are situated in the neighbourhood of the docks, and have been erected from the designs of Mr. H. C. Portsmouth, at a cost of about £10,000. The accommodation includes about sixty offices, arranged on three floors, with accommodation for a caretaker on the upper storey. There is also ample room in the basement for storage and other purposes. The main elevation to Cambrian Place is carried out in Portland stone up to the cornice over the ground floor, and the remainder is dressed with stone and Ruabon red bricks for the walling. The areas are all faced with white glazed bricks, and all the rooms are well lighted. The staircases are of reinforced concrete.

Some plain and inexpensive hollow-wall concrete cottages have been erected in Bathing-place Lane, Stowmarket. The accommodation consists of parlour, living-room, with larder and pantry, kitchen, with sink and copper, and three bedrooms, each separately approached. The outside and party walls, as well as the internal walls on the ground floor, are constructed of concrete blocks made on the site ; the partition walls on the first floor are constructed of 2 in. breeze concrete slabs, grooved and tongued together. The roofs are covered with French-pattern pantiles, or Bridgewater-pattern concrete tiles. The expense of the water and drainage to the council sewer is not included in the cost of the cottages, which is £150 each. The interior of each concrete block has two square cavities, so as to secure a damp-proof wall. The plans were prepared by MR. HENRY J. WRIGHT, Ipswich.

A new residence for the Workhouse Master has recently been erected at the Union, Oulton, for the Mutford and Lothingland (Lowestoft) Board of Guardians. The architect was MR. ERNEST C. ALLERTON, of Lowestoft, whose design was selected in a limited competition in which seven designs were submitted. The same architect has also recently erected at the Oulton Union two shelter-veranders for consumptives, one for each sex, and carried out extensions to the Nurse's home, and has also submitted a report for the improvement and extension of the Sewage disposal plant. Mr. Allerton also has in hand alterations and additions to the Gisleham (Lowestoft) Elementary School and a large re-building scheme in South Lowestoft, comprising houses, shops and tea-rooms, for Mr. H. J. Reddish, caterer. The property is on the site of some old houses and shops recently demolished, and will form a notable addition to the buildings on London Road South of that town. A portion of the work is to be completed and open for the forthcoming visiting season.

The new Central School of Science and Technology, built at a cost of £20,000, in Victoria Road, Stoke-on-Trent, was recently opened by the Right Hon. J. A. Pease, President of the Board of Education. The front block comprises the rooms for pottery and mining instruction, and a wing at the rear is equipped for the teaching of physics and chemistry. On the right of the main entrance is the pottery department, consisting of a laboratory, grinding and furnace room, a smaller laboratory for commercial analysis, and a private room for the principal. The mining department, to the left of the entrance, comprises a general laboratory, rooms for gas testing, gas analysis, and photometric experiments, and a private room for the principal. Between these two wings are the entrance hall and staircase, and beyond are the cloak rooms, lavatories, and clerk's office. The upper story of the main building contains a reference library, museum, two lecture rooms, and an assembly hall. The rear wing contains, on the ground floor, elementary and advanced physical laboratories. The building is carried out in brickwork, with stone dressings. The School has been jointly designed by MR. J. HUTCHINGS, architect to the County Education Committee, and MR. S. B. ASHWORTH, architect to the Stoke Education Committee.

Hythe Concert Hall Competition.

Members are requested not to take part in this Competition, the conditions of which are not in accordance with those approved by the Society.

Papers for Session.

The Council will be glad to receive offers from Members who are prepared to read a paper and give a Lantern Lecture during next Session. Suggestions for subjects will also be welcomed, or for popularizing the Meetings in any way, with a view of attracting a more representative attendance.

Students' Quarterly Competitions.

Students are reminded that a prize of the value of £3 3*s*. 0*d*., with a second prize of the value of £2 2*s*. 0*d*., if more than ten Students compete, are offered for the best set of Architectural Sketches made since November 1st, 1913. The sketches must be deposited with the Secretary not later than July 31st next. Full details are given in the *Year Book*.

The Membership.

Elected.—JOHN PERCIVAL BRIDGWATER, Birmingham; ALEXANDER THOMSON HEATHCOTE, Manchester; GEORGE BLAIR IMRIE, London; WILLIAM ROBERT BURTENSHAW MANN, Leicester; THOMAS GEORGE PRICE, P.A.S.I., Llanelly; ERNEST ROSE, Rhodesia; ALBERT JOHN THOMAS, London. *Members.*

Resigned.—L. ORD PHILLIPS, London. *Student.*

Reinstated.—F. CAVENDISH PEARSON, Sutton; and G. WRIGHT, Sydney, N.S.W. (late of Walsall).

Ordinary Meeting.

An Ordinary Meeting of The Society of Architects will be held at 28, Bedford Square, W.C., on Thursday, June 11th, at 6.30 p.m.

Agenda :—

1. The President to take the Chair.
2. Minutes and matters arising.
3. Nominations and Announcements.
4. Election of Members.
5. Any other business.

THE

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The Society is not, as a body, responsible for the opinions expressed by individual authors and speakers.

Registration by Charter.

In our last issue, we suggested that the present Corporate Members of the R.I.B.A. would not consent to share their privileges with a " dying " class (Licentiates), who have no claim to special consideration inasmuch as they already have opportunities common to all, of qualifying by the usual channels for Corporate Membership. One of the Licentiates, Mr. F. A. Winder, of Sheffield, writes to us protesting against what he describes as a statement hardly in keeping with the usual straight hitting and fairness of the *Journal*. That is a matter of opinion, but we notice from the correspondence in the professional journals, that we are not alone in expressing the opinion referred to.

Another Licentiate, Mr. Elwig, in a letter published in the *R.I.B.A. Journal*, raises the question whether it would not have been as well for those who are now Licentiates to have thrown in their lot with the Society, where at least there is unanimity in regard to a Registration policy, and no contentious or bickering sections.

That is the whole difference between the two bodies. Each changes the personnel of its Council annually, but in the one case the Registration policy changes with it, and in the other that policy always remains the same.

It is understood that the new R.I.B.A. Council is composed largely of pro-registrationists. If so, there is presumably an end of the present Charter proposals, and some hope for a scheme of a wider character which shall be at least a stepping stone to Registration by Statute, though it seems too much to expect that the new Council will be strong enough to go boldly for Statutory Registration.

Proceedings.

The Seventh Ordinary Meeting of The Society of Architects, for the Session 1913-14, was held at 28, Bedford Square, London, W.C., on Thursday, June 11th, 1914, at 6.30 p.m.

Mr. E. C. P. Monson, F.R.I.B.A., F.S.I., Vice-President, having taken the Chair, it was resolved that the Minutes of the last Ordinary Meeting, as printed in the *Journal*, be confirmed and signed.

Nine nominations for Membership were announced, and a ballot was taken for the election of the following Candidates to Membership, and was declared to be unanimously in their favour.

Adams. William Henry,	Council House, Romford, Essex.
Bartlett. Percy James,	St. Annes, 1, Woodgrange Gardens, Woodhouse Road, N. Finchley, N.
Binks. Harold Percival,	"Royal Chambers," 31, Scale Lane, Hull.
Brown. James,	Gateway Chambers, 26, Castle Street, Shrewsbury.
Durnford. Alfred Henry,	16, St. Agnes Place, Kennington Park, S.E.
Easton. Arthur,	5, Colonial Chambers, Princes Dock Street, Hull.
Hedley. Gerald Montague,	15a, Baker Street, W.
Holding. Edward de Wilde,	Corn Exchange Chambers, Northampton.
Joslin. Gordon Arthur,	192, Eglinton Road, Plumstead, S.E.
Rainger. Herbert Thompson,	Lloyd's Bank Chambers, Cheltenham.
Steele. Matthew,	Masonic Hall Buildings, Bo'ness.
Story. Philip Francis,	The County Hall, Kingston-on-Thames.
Whitwell. Edward,	Brynteg, Abersychan, Monmouthshire.

It was announced that the Council had admitted R. M. Fulton, Forres, to the Register of Students, and that Mr. George Baines, F.R.I.B.A., had at his own request been reinstated to membership.

The Chairman announced, with great regret, the death of Mr. George E. Bond, J.P., of Rochester, the immediate Past President of the Society, and referred to his valuable work on behalf of the Society.

On the proposition of Mr. Arthur C. Russell, seconded by Mr. Moscrop Young, the following resolution was passed in silence, the members standing :—

> "That this Society desires to place on record its appreciation of the services of the late George E. Bond, Past President, and its sense of the great loss which it has sustained by his death, and to offer its sympathy to the members of his family in their bereavement."

Architectural Competitions.

A Judge and Jury System.

Indian Engineering, accepting the view that the present system of adjudication is not entirely satisfactory makes the suggestion that where only one assessor is appointed, he and a committee representing the promotors of the Competition should occupy respectively a position analogous to that of a judge and jury.

An architectural competition, says our contemporary, has to be considered from the points of view, not only of the assessor and the competitors, but from that of the committee of the body calling the competition, because it is responsible to the whole body and has been appointed for the purpose not only of receiving and communicating the views of the assessor but of adjudicating upon them ; and where necessary even coming to a different decision. It appears to us that an assessor should fill the position of a judge and a committee that of a jury. The judge expounds the points of the case, and the jury forms a decision on it which may or may not accord with that of the judge. It may be held that in the matter of an architectural competition the points are too technical for any but a professional to form a correct judgment, but from this view we differ. It is no more difficult for a lay committee to decide which is the best design after the assessor has made a clear exposition of each one in the competition, than it is for a jury to decide the issue " guilty " or " not guilty " after the judge has made a clear summing up of the evidence.

The action of an assessor in an architectural competition might with advantage be analogous. Why should he take the decision out of the hands of the committee and pronounce arbitrarily in favour of a certain design ? He may be unconsciously swayed by idiosyncrasy, by personal predilection for a certain class of structure, by, in short, many considerations that would not appeal to another assessor, so that it may be safely said that with another assessor another decision might be arrived at. It is for this very reason that Courts of Justice recognize juries. It is for the committee to give the verdict and for the assessor to give the advice. This course will lead to the designs being much more fully examined ; they will be criticized by a great many instead of by one ; the expert criticism of the assessor will necessarily be more complete than when he feels himself called upon to say little more than which he thinks best. It is likely that a more correct judgment will be arrived at, and, whatever it is, that it will receive more general acceptance.

Registration in Queensland.

In our issue of May last, Vol. VII., No. 79, page 271, we referred to the action of the Queensland Institute of Architects, in placing before the Minister for Public Works, some reasons why legislative action should be taken to regulate the practice of architecture.

The principal provisions of the draft Bill presented to the Acting Premier are as follows :—

The formation by the Act of a corporate body to be called " The Association of Queensland Architects," of which every registered architect shall become *ipso facto* a member.

QUALIFICATION FOR REGISTRATION.

The qualification for registration within six months of the passing of the Act is that the candidate was at that time a resident in Queensland and :—

(a) was a member of the Queensland Institute of Architects or of any other institute or society of architects of equal standing ; or

(b) was publicly and *bona fide* practising as an architect in Queensland ; or

(c) was at such aforesaid time, or prior to the coming into operation of this Act, engaged as an assistant to an architect in Queensland and has had at least seven years' professional experience ; or

(d) that he is possessed of qualifications and experience which may be declared by the Governor-in-Council, by proclamation, to be equal to those in one or other of the foregoing instances.

Upon the expiration of six months from the date of the coming into operation of this Act no person shall be entitled to be registered in the said register as an architect unless he shall prove to the satisfaction of the majority of the whole council, hereinafter mentioned, that at the date of his application for registration he is resident in Queensland and has attained the age of twenty-one years ; and

(a) has passed the examination for associateship of the Royal Institute of British Architects or the examination for membership of The Society of Architects, of London, or the examination or examinations conducted by the council and prescribed by the by-laws of the association ; or some other examination which may be declared by the Governor-in-Council, by proclamation, to be equivalent to one or any of these examinations, and has in addition had at least four years' professional and practical experience as an assistant to an architect ; or

(b) that prior to, or at the time of, the coming into operation of this Act he was registered as an associate or fellow of the Royal Institute of British Architects, of London, or the Queensland Institute of Architects or of some other society or institute of architects which the Governor-in-Council may, by proclamation, declare to be of a standing equal to that of one of the said institutions.

PROFESSIONAL MISCONDUCT.

The following acts and practices, whether of commission or omission, upon the part of any architect shall be offences under the provisions of this Act, and, if found guilty by the Supreme Court of having committed or engaged in any one or more of such acts or practices, such architect shall be liable to be suspended from practice for any period that may be decided on by the said Court or to have his name removed from the register as hereinafter provided ; that is to say: —

(a) allowing any person except a registered architect in partnership with himself to practice in his name as an architect ;

(b) directly or indirectly sharing his professional remuneration with any person, not being a registered architect in partnership with him, or directly or indirectly accepting any share of the professional remuneration of such persons or any commission or bonus thereon ;

(c) signing accounts, statements, reports, specifications, plans or other documents purporting to represent any architectural work performed by himself, which work shall not have been performed under his personal supervision or direction ;

(d) directly or indirectly paying a person a commission for bringing him work, giving any person monetary or other consideration as a remuneration for bringing him work, or for inducing other persons to give him work ;

(e) touting or otherwise improperly obtaining or attempting to obtain work ;

(f) performing any architectural work in connection with any matter which is the subject of dispute or litigation, upon condition that only in the event of the said dispute or litigation ending favourably for the party for whom the work is performed shall payment be made for such work ;

(g) conducting himself unprofessionally or dishonourably in connection with any work performed by him as an architect ;

(h) wilfully disobeying, refusing, or neglecting to carry out and perform any by-law or order lawfully adopted and established by the association regarding any point of professional practice ;

(i) engaging in any practices or performing any acts similar to those acts and practices prohibited in the foregoing sections.

Opportunities for answering any charges is given and the usual penalties enacted in proved cases. Every person on the Register is to be entitled to call himself "Registered Architect, Queensland." The rest of the Act provides the necessary administrative machinery.

It will be noted that the draft Bill is similar in principle to those of New Zealand and the Transvaal, etc., and different to that proposed at home by The Society of Architects, inasmuch as it is Registration within one architectural body as against registration of the whole profession.

The weak point in our judgment in this and similar proposals, is that it does not prevent unqualified persons from practising as architects, which is the crux of the whole matter. As a matter of fact, it leaves the title of architect to be improperly appropriated even more widely than is at present the case.

Registration as we understand it, must, to be of any use, provide that no person except an architect may practise the profession, and that every person qualified to register may do so irrespective of membership in any professional body.

Royal Institute of Architects of Ireland.

Question of Registration.

At the General Meeting of the Royal Institute of the Architects of Ireland, the members considered the attitude the architectural profession in Ireland should adopt towards the proposal of the Royal Institute of British Architects, for extending the Charter of the latter body, in place of proceeding with an effort to register the whole profession by means of a Parliamentary Bill. The President, Mr. R. Caulfeild Orpen, B.A., R.H.A., occupied the chair, and there was a large attendance of members.

After considerable discussion, the following resolution was proposed :—

> That the members of the Royal Institute of the Architects of Ireland be furnished with a copy of the Bill drafted by the Royal Institute of British Architects, 1905; the Bill of the Society of Architects, 1913; the provisions of the proposed extended Charter, and the President's introductory address; and that the opinion of the members should be sought as to whether they approved the Bill or the Charter, and also whether the Irish Institute should support the British Institute in opposing the Parliamentary Bill promoted by the Society of Architects.

The motion was carried by a majority, and the meeting was adjourned for a fortnight.

The Irish Builder in a leading article on the subject, briefly recalls the circumstances which led to the present situation, and while our contemporary agrees that half a loaf is better than no bread, it doubts whether the Institute's policy is really "half a loaf." It goes on to say that Irish architects must remember, first, that active support of the British Institute's policy in this matter definitely involves opposing the principle of statutory legislation, as advocated by The Society of Architects, a measure which the Irish Institute, in common with all, or nearly all, the English provincial societies, allied, like itself, to the British Institute, has for years past held to be essential for the protection of the architectural profession. Therefore they must consider how far any action of theirs may be consistent with their beliefs and declarations in the past.

If the Irish Institute supports the British Institute, it definitely opposes the Society, and strengthens the opposition to the already doomed Registration Bill. We cannot think that that would represent the views of Irish architects as a body. Whereas if they refrain from active support of the British Institute, it does not at all involve opposition to that body getting its new Charter, as it almost certainly will, for its own members are united on the point.

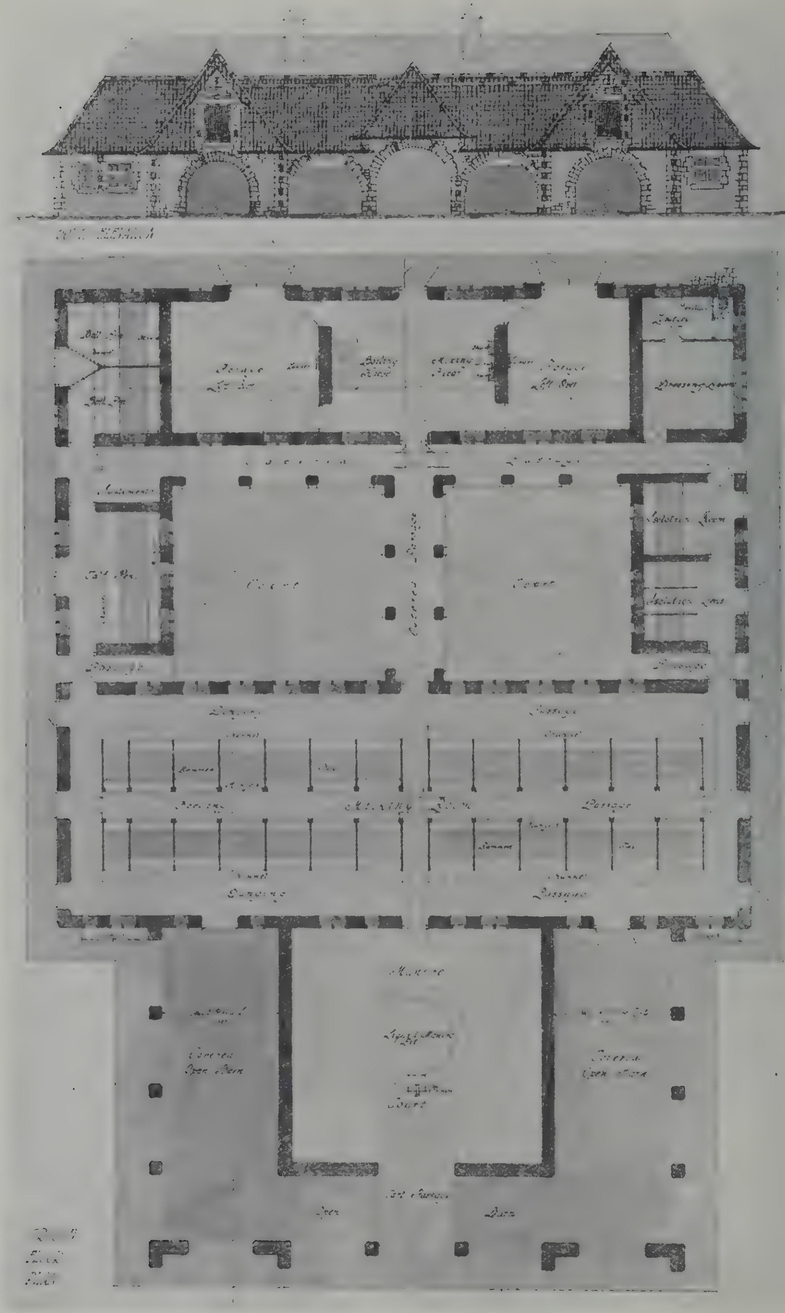
Further than this, the circumstances of practice in Ireland are so essentially different from those prevailing in England, that only Irish architects can know what is best for us in this country. A council composed of the leading architects in London cannot know or understand the conditions prevailing, say, in the West of Ireland, or how they affect architects.

Our contemporary is very strongly in favour of loyalty towards the senior body, and of anything which will make the profession, as a whole, an important and powerful central authority, capable of advancing the mistress Art, and of governing the ethics of the calling in all general matters, because such a strong central body may command respect from the Philistine general public, where isolated bodies would only be treated with contempt; it is, moreover, good to weld the whole profession together, so that ideas may be broadened, and where necessary concerted action taken, but when local conditions effect the issue, only local men can decide what course is best.

Moreover, it is stated that grave political changes are impending in Ireland; it is quite possible that any such changes may substantially affect this question, important to architects, but so insignificant to the public. It therefore behoves architects to be alive to changing circumstances and different conditions. Even in normal times the conditions here and in England widely differ.

All things considered, it is thought it would be wise for Irish architects to refrain from active support of the Institute proposals and opposition to those of the Society, preserving a neutral attitude and allowing matters to develop further.

[We have reason to know that the majority of Irish architects like their English brethren are as a body in favour of Statutory Registration.]—Ed.



A Dairy Farm. The Farm Buildings. By Charles Bell.

The Society's Design Competitions.

The Travelling Studentship, 1914.

Six sets of designs were received in this Competition, the subject of which was "a Dairy Farm." The assessors, Messrs. A. Alban H. Scott, E. J. Partridge and Thos. Wallis, have issued the following report:—

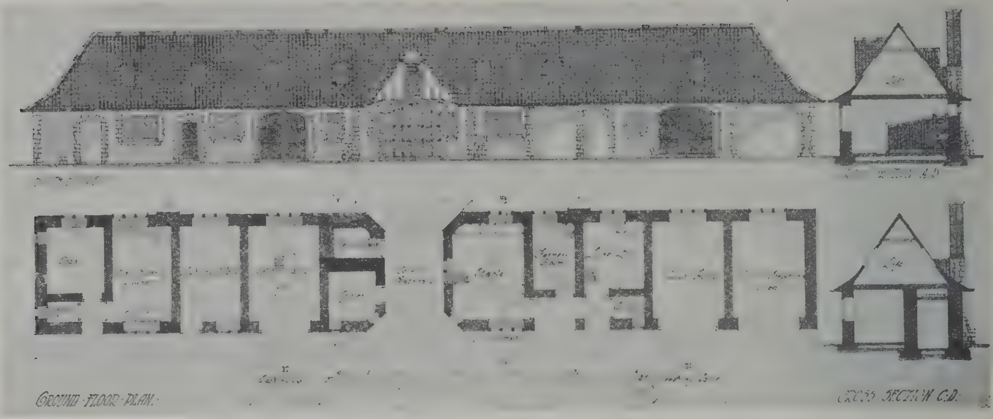
The 1914 Competition was a little out of the ordinary in regard to the subject, and in framing the particulars so as to interest the students in the study of a special class of work, the Assessors did not expect absolutely model schemes to be submitted. The designs on the whole indicate that the subject is one with which most of the competitors had not made themselves familiar so far as the particular requirements of a dairy farm are concerned. For instance, some competitors place the isolation stalls directly off the milking room or in close proximity to it. As these stalls, as the name implies, are for cows in a state of illness or under observation, they should be isolated in the same sense as the isolation rooms of a hospital.

Speaking generally, the designs show that a keen interest was taken in the subject by the competitors, and if they will follow up their preliminary studies in this special class of work and ascertain for themselves the more detailed requirements, bearing in mind that a dairy farm above all other businesses must have its buildings designed on the most hygienic and sanitary lines possible, their work in this competition should prove of very considerable advantage to them in their career.

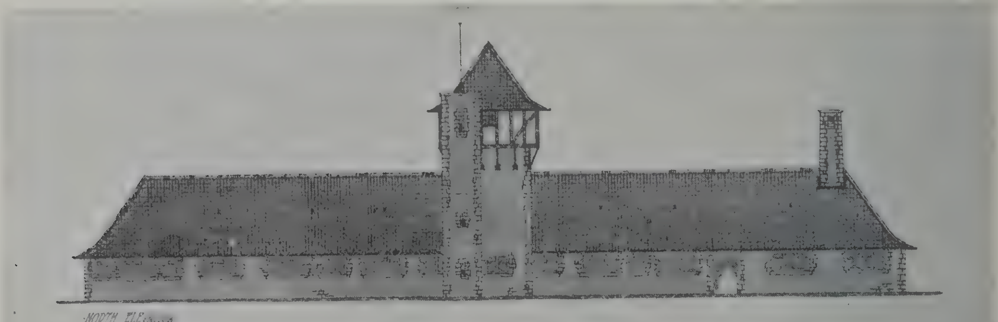
No. 30 (Placed First.) The general arrangement of the milking room itself is satisfactory, but to connect the manure areas and manure pits directly with the milking room by a door and windows is the planning of fifty years ago. The isolation room could, with advantage, have been more isolated. The dairy block would have been greatly improved if an external verandah had been provided.

The house is pleasing and well arranged, the office being suitably placed for access both from without and within. The kitchen apartments are also nicely worked out and shut off from the remainder of the house. The men's house is a conveniently arranged building, the bathroom being well placed near the entrance, but a separate W.C. should have been provided. The lighting in the kitchen passage would be defective. The cottages are not so well planned, the approach from the kitchen to the scullery would be awkward, and the headway under the stairs would be insufficient.

The farmhouse is very picturesque, although possibly the arches in the verandahs on either side shown in the S.W. elevations are somewhat out of scale. The details are exceedingly well rendered and fully convey the character of the building. The draughtsmanship does great credit to the author, and gives a good impression of a building erected in a stone district.



THE FARM BUILDINGS.



A DAIRY FARM. THE DAIRY BUILDINGS. BY CHARLES BELL.

The design generally is very cleverly treated and show a good knowledge of proportion and the value of contrast in texture and composition of materials.

No. 26. The open barns in this design are not in a happy position. They are formed into enclosures which is undesirable. The general lay-out of the milking room is satisfactory, but there should not be a direct entrance from the passage in the food stores. The isolation stalls should be placed in such a position that they are isolated in the proper sense of the word.

The general arrangement of the farmhouse is poor. Much space is wasted in the hall and landing, and the stairs are too narrow to run between the walls satisfactorily. In the men's house, a large amount of space is occupied by passages, and the bathroom would be better utilized if arranged in conjunction with the cloak room and approached from the entrance hall rather than from the bedroom corridor. The kitchen is somewhat cramped.

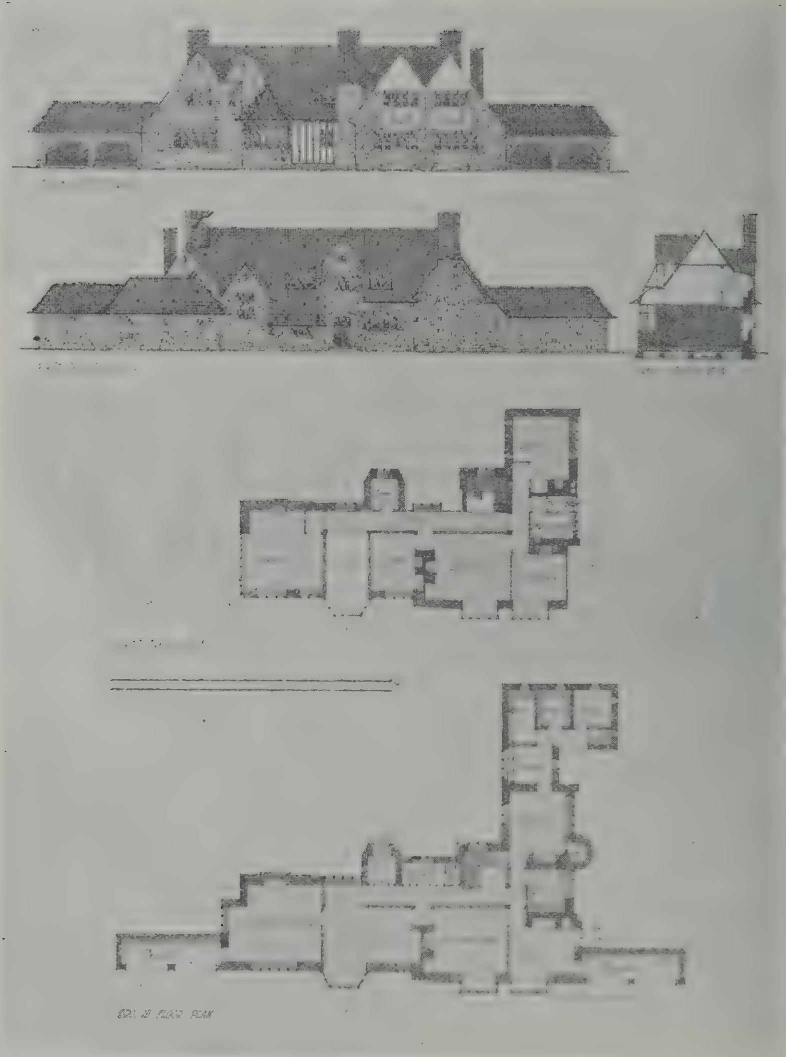
The very usual cottage plan shown has been found to work well in practice, but with so large a scullery, a separate fire-place could well be arranged, and the bedroom over could be made more convenient. The design in itself is very poor in its treatment, and not at all suitable for buildings of this character.

No. 27. The general plan of the milking room is satisfactory, but the fodder room is not in a good position. The isolation stalls as well as the dressing room and W.C. are in an extremely bad position in relation to the milking room.

The dairy block should not have been placed close to the farmer's residence, but the planning of the dairy is generally of a fairly satisfactory nature.

The farmhouse is conveniently arranged, but the second sitting room and office are small. In the men's house, the bathroom is placed near the entrance and the lavatory and W.C. accommodation might with advantage have been arranged in conjunction. The cottages are conveniently planned and provide the necessary accommodation in a satisfactory manner. The elevations are characteristic, but the author in his half-inch detail has not increased the interest in his work, and the draughtsmanship, although neatly inked, does not do credit to the design.

No. 28. A dunging passage as usually understood, should be unknown in the milking room. The food storage generally appears to have been provided for on a liberal scale. It would have been nicer if the isolation stalls had been placed with the windows not quite so close to the straw barn. Solid partitions should not be used in the milking room. In the dairy block the boiler house should not have an entrance from the milk receiving room. The farmhouse is well arranged, although the drawing room might have been considerably improved. The internal walls in some cases would require to be more substantial, and it is very desirable that a linen store should be provided. In the men's house the kitchen and larder are small, and no provision is made for coats and hats. The bathroom would be better arranged near the entrance.



A Dairy Farm The Farm House. By Charles Bell.

The cottages are conveniently planned, but one front bedroom is somewhat cramped.

The draughtsmanship and the elevations are not very encouraging, and the author has not treated his buildings in any sense in an ambitious manner, and they do not convey the nature of the subject particularly well.

No. 29. It is generally found more convenient for the manger in the milking room, to be placed in the centre of the central passage. The milking room could have been greatly improved.

The isolation stalls are placed in a very much better position than in most of the schemes submitted, but the rooms for fodder would have been better if placed further away from the stalls.

The arrangement of the barns might have been better if they had been of greater width. A feeding passage is unnecessary in an open barn. The dairy block is generally well arranged, but the bottling department has been somewhat cramped.

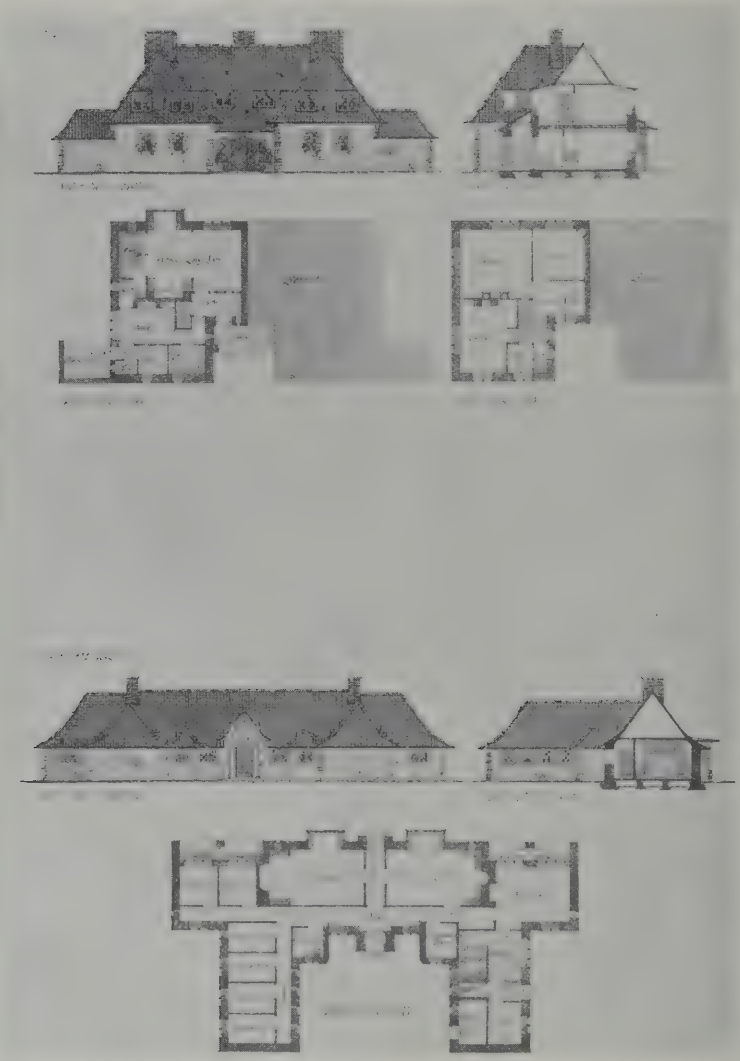
The farmhouse arrangements are good except the office which can only be approached across the hall, and three of the bedrooms are small. The accommodation for the single men is worked in conjunction with the two cottages, resulting in a pleasing layout, but the object of the play room is not quite clear. The cottage accommodation is nicely arranged, but the placing of the W.C. in the bathroom is objectionable.

The competitor shows a very good knowledge of design, and the materials chosen add a considerable amount of interest to it. The half-inch detail is well drawn, and is sufficient to show the author's good taste.

No. 31. The general plan and lay-out of the milking block is satisfactory. The building could with advantage have been extended another few feet so as to allow a passage way at the end of the milking room. The food preparing room is in a good position and of good shape, but the adjoining storage for roots, cake, grain, etc., is rather cramped, and it would have been better if the unnecessary feeding gangway had been omitted and the space thrown into the food storage.

The calf pens should not have an entrance direct into the food storage rooms, and these should not be placed adjoining the bull pens.

The isolation stalls are fairly well placed, but they could with advantage have been further away from the cloak room and the milk weighing room. The milking room is of unnecessary height, and the roof could have been cut down very considerably. It would appear to be more desirable for the divisions to the stalls in the milking room to be formed of open skeleton tubing construction, and the surface of the floor should be absolutely impervious. The suggestion of using chalk in the stalls is extremely undesirable. Although a pigeon cot might lend to the architectural treatment of the scheme, it is not desirable to have pigeons roosting close to the food and milk rooms. The dairy block is generally fairly well and conveniently



A Dairy Farm. The Cottages. By Charles Bell.

arranged. The boiler room and food storage is in a good position, as is the washing room and lavatory. One improvement might have been made if the creamery had been arranged with an entrance other than directly from the milk receiving room. The dairy block should have been treated more on the lines of hospital construction. Windows divided up into small panes entail a large number of ledges, accumulating dust which is undesirable. It would have been better if the majority of the rooms in this dairy block had glazed bricks to the walls to the full height. Generally speaking, the design of the dairy farm proper shows a good general knowledge, carefully applied and deserves special mention. The farmhouse is conveniently arranged for service, but the size of the drawing room is excessive, and the placing of the W.C. in the bathroom is objectionable.

Bedroom ventilation would have been better secured if the windows could have been carried higher.

In the men's houses radiators are shown in the first floor corridors, but no provision appears to be made for heating. The scullery would be better if placed with more direct access from the kitchen, also the bathroom if arranged nearer the entrance. In the cottages the bathroom for the greater part of its length is 3 ft. 6 ins. wide only, and in two of the bedrooms it would be difficult to place the beds. The whole planning shows that the competitor has taken a most intelligent interest in the work, and shows very great promise for the future.

The elevations are well considered, having in a quiet and dignified manner conveyed the character of a farm building. Unpretentious and well drawn.

The examination of the designs generally shows a want of appreciation of the principal items, such as the proper placing of isolation stalls, the sanitary arrangements of men's houses, faulty design in cottage planning, and a lack of knowledge as to the uses of the open barns which should be fenced or walled in so that cattle can use them without being tied up.

The prices throughout vary very much, and would require considerable modification in practice.

THE FOLLOWING CRITICISMS HAVE APPEARED IN PROFESSIONAL AND OTHER PAPERS :—

The subject this year for a Dairy Farm has been responded to by only six competitors, and this to some extent may be accounted for by the rather specialized character of the problem, which is also a little out of the ordinary. The winner of the studentship is Mr. Charles Bell, 72, Forest Avenue, Aberdeen. The assessors were Messrs. A. Alban H. Scott, E. J. Partridge, and Thomas Wallis, whose report fairly enumerates the points of this series of plans, which afforded little choice in determining the award. Generally speaking, the assessors consider that a keen interest in the subject has been taken by the competitors, though in items of detail the arrangements display, as might be anticipated, some want of technical knowledge, and, " bearing in mind that a dairy farm, above all other businesses, must have its buildings designed on the most hygienic and sanitary lines possible," model plans are not to be expected from students' competitions.

The architectural character of the set of drawings (No. 31) placed last is, perhaps, the most artistically rendered of them all. The drawings of this design are elevationally unpretentious, and suitable for countryside work, while the planning of this scheme evinces intelligent promise. Nevertheless, for all that may be urged in this regard, the author's design would need considerable revision. His faults are so patent. For example, the enormous roof over the " milking-room " would never do, for it is exactly double the height from the under side of the tie-beam to the ridge as compared with the distance below this beam to the floor. The one-span roof accounts for this too-abundant and needless enclosure. The excessive width of the building is to some extent due to the third unnecessary feeding-gangway, though this milking-block is otherwise rather good in its plan. Chalk for the stalls is most objectionable, and the calf-pens should not adjoin the bulls' house, neither should either have a door leading out of the food storage.

The selected design (No. 30) is very compactly arranged, the farmstead being almost square, with arcaded open barns in front, ranged round the dung-yard, where there is a circular manure-pit. This manure area, however, communicates directly with the milking-room by a door and windows in an antiquated and radically bad manner. The milking-room has the advantage of cross ventilation by means of little vertical lights opening on to a flat set above the central feeding-passage and in the valley between the two roofs. In the winter, snow might easily give trouble here, and access for clearing out the snowdrift would be most desirable. The general contrivance shown by Mr. Charles Bell is satisfactory, and the layout on the irregular outlined site fixed by the Conditions is rather good. The farmhouse is too rambling in character, and not inexpensive to erect, with so varied a disposition of its parts. The office, entered from the hall, is reached externally from a verandah, and the design is very picturesque, while the kitchen wing is neatly cut off well from the house. In old farms the kitchen constituted the principal room in the house, round which life centred. Now, in this advanced age, we have a fine spacious central hall for social considerations, pleasingly attractive and very " up-to-date." The men's house is a one-story building, the inmates using cubicles, and the bathroom is near the entrance for " cleaning down " readily. But one w.c. in this room is not enough, and an outbuilding for such provisions would have been far preferable. The pair of semi-detached cottages have an awkward connection through a larder between the scullery and the kitchen. The sprawling arch in the centre forms a porch to the front doors of these cottages, which adjoin in an objectionable way. The walls are of rubble-stone, with red-pantiled roofs. The total cost of the group of buildings is set down at £7,494 15*s.* 10*d.* The farm premises are cubed at 3*d.* per foot, the farmer's house at 5*d.*, and the cottages at 4½*d.*, and 5*d.* per foot cube measured up in the usual way.

No. 26 is placed second; but the design is very indifferent, bald, and elementary. The barns or cow-byres take the form of covered-in enclosed yards, without sunshine, wedged in as they are. The milking-room is laid out well; but the isolation-stalls are not sufficiently detached to justify their designation. The farmhouse is commonplace, with an ungainly central hall and staircase built between two walls in an ugly fashion. We do not confirm this allocation for the second in order of merit, but we understand this is the order intended by the hanging arrangement for the exhibition of these plans at the Society's house, 28, Bedford Square.*

No. 27 marks an exceedingly heavy set of coloured drawings, and the plan of the milking-room is considered good; but the isolation-stalls, dressing-room, and water-closet are in an extremely bad position, opening as they do out of it. The farmhouse is too cut up, with projecting wings in its front—one for the office, and the other for the scullery. The dairy block adjoins this house. Otherwise its plan passes muster, and seems conveniently disposed.

No. 28 is utilitarian, with iron sheds cluttering up the site. A dunging-passage, as generally understood, should be unknown in a milking-room. The exteriors of the houses and cottages have roughcast upper floors, and are most ordinary in their design—worse really than in No. 26, because those elevations, though so poor, at least are not pretentious, like No. 28 displays.

No. 29 shows a feeding-passage in the middle, with the mangers set the other way on, so the cows stand ready for milking, but not for feeding. "It is generally found more convenient for the manger in the milking-room to be placed in the centre of the central passage." No feeding-passage is needed in an open barn as here provided. The style chosen by the author is suitable for brick, and he evinces an interest in his design from an architectural standpoint with becoming reserve. His half-inch detail displays taste and nice drawing.—*The Building News.*

There is a notable inequality in the subjects set for the Studentships of 1913 and 1914, for no one will deny that a scheme for a Dairy Farm demands much greater and more varied knowledge than last year's subject of a group of Almshouses. Half a dozen students only have grappled with the difficulties, nor is the resulting collection of drawings at all out of the ordinary. The student placed first is Mr. Charles Bell (of Forest Avenue, Aberdeen), and his work certainly exhibits an intelligent appreciation of the problem, though to our mind design No. 27 should have been placed in the enviable position allotted to No. 30. For the grouping of the buildings in the former is immeasurably superior, the farmhouse receiving a central position and a consequent power of supervision such as is its rightful claim; at the same time, too, the buildings are here set out with an academic idea of inter-relation and quasi-symmetry that would be quite justifiable, if carried out in execution. But the difference in estimated cost between these two schemes is remarkable, for though Mr. Bell uses lower foot-cube prices throughout than No. 27 (except for the farmhouse, where they agree in value), yet his total cost exceeds No. 27's estimate by nearly £2,800. The variation in estimates is rather striking in other directions. Design No. 31, with foot-cube prices of 5*d.*, 7*d.*, 8*d.*, and 9*d.*, produces the expensive total of £12,500—a rather prohibitive outlay.

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* The Assessors placed No. 30 first; the other designs were arranged for exhibition in the order in which they were numbered on receipt of the drawings, and not in order of merit.—Ed.

But, leaving now the matter of prices, we will revert to Mr. Bell's drawings. And, in the first place, regarded from the standpoint of draughtsmanship, they are very praiseworthy, conveying a freedom of touch and a command of the brush which are greatly pleasing. Regarding the planning, it should be obvious that the aerial intimacy between the manure-store and the milking-room should be non-existent; and in other respects, too, the assessor's report makes acutely just criticisms upon this design, both for good and ill. We think the upper portion of the entrance hall is an uncalled-for luxury, and it would have been better to utilize the area for a bedroom, instead of raising over the kitchen for this purpose.

We prefer the parallel setting-out of buildings in relation to the main road, as contrasted with the unmeaning disposition employed by Mr. Bell, and in this respect also No. 27 scores. No. 28 comes second to No. 27 as regards the position of the farmhouse upon the site. In this design (No. 28) the single-men's house is notably well arranged; we think that the feeding passage from the mixing-room would have been better if continued axially in the milking-room.

No. 29 is good enough to provide a spacious playroom, and though its *raison d'être* is not sufficiently obvious, yet it is a case of utilizing waste space. The elevational design is good.

In No. 26 the details are well and carefully drawn, but it is a mistaken labour (in students' work at least) to elaborate sewage tank. In No. 31 the housing quarters for the staff are placed more advantageously than the farmhouse itself.

On the whole, the competition is a distinct advance upon last year's in interest and in the resultant work.—*The Architect and Contract Reporter.*

The designs of "A Dairy Farm" entered for competition in the travelling studentship of The Society of Architects were on exhibition this week at 28, Bedford Square, London, W.C. Six sets were presented, and, although all of them showed some defect, the general draughtsmanship was highly creditable. The assessors state that the designs generally revealed a want of appreciation of the principal items, such as the proper placing of isolation stalls, the sanitary arrangements of men's houses, cottage planning, and a lack of knowledge as to the uses of the open barns. The impression conveyed was that the candidates were more proficient in their skill of draughtsmanship than in their knowledge of practical affairs of dairy farming. Competitions of this description are valuable in directing the attention of young architects to the importance of studying utility, as well as structural effect, in the planning not only of dairy homesteads, but of farm buildings in general. Many expensive farmsteads, substantial and pleasing to the eye, are deficient in internal arrangements, alike as regards sanitation and convenience. The requirements of the farm are a special study, and The Society of Architects, in conducting competitions likely to encourage recognition of this fact, is doing a service both to the profession and to the farming industry.—*The Field*.

THE WINNER OF THE TRAVELLING STUDENTSHIP.

Mr. Charles Bell, the winner of the Travelling Studentship, 1914, was educated at the Morgan Academy, Dundee, thereafter attending private classes. Subsequently he served an apprenticeship of four years with Messrs. Maclaren, Sons & Soutar, Architects, Dundee, and remained with them as Junior Assistant for about a year and a half. For five years Mr. Bell attended the Dundee School of Art and Technical College, and gained a number of prizes, and a First Class Certificate for the Architectural Course; also First Prize and Certificate for Surveying and Levelling at University College, Dundee. He then entered the office of Professor W. A. Scott, A.R.H.A., M.S.A., A.R.I.B.A., M.R.I.A.I., Architect, Dublin, as second Assistant, and within a year was promoted to Managing Assistant. He remained there for about three years, and is now with J. A. O. Allan, Esq., Architect, Aberdeen. Mr. Bell has competed for some of the R.I.B.A. prizes, and his design submitted for the Soane Medallion in 1912, was reproduced in *The Architect*.

Mr. Bell proposes to utilize the Studentship in making a sketching tour in the districts of Bath, Oxford, Cambridge, York and London, in order to fulfil the terms of the Competition.

The designs will be on view, during July, at the Society's headquarters, 28, Bedford Square, London, W.C.

The Rise and Development of Norman Architecture.*

Mr. Bright Fraser in his essay submitted in the Students' Quarterly Competition, outlines the coming of the Scandinavians in the fifth century, and shows how, softened by the culture of their new surroundings, they began to imitate the arts of the conquered races, and eventually promulgated a new style of architecture, the Romanesque, the true basis of the Gothic style. He further shows in a few historical notes how the converting of the Northmen to Christianity, gave rise to the formation of the Monasteries, wherein they were taught architecture and other arts.

Mr. Fraser refers to the employment by the Greeks of the lintol as the chief factor of their architecture, and the introduction of the arch by the Romans, from which was established the vaulted support.

Charlemagne attempted to build on a more ambitious scale than his predecessors, the barbarian kings, and introduced craftsmen from Lombardy and Spain, and sent them to study Grecian and Roman buildings with the hope of reviving those styles. The result of the experiment was the Renaissance, or Revival. The Renaissance builders however, had greater difficulties than their predecessors to contend with, owing to the lack of skilled workmen and suitable material, and their productions were, therefore, not so great a success. It was the religious bodies who in the twelfth century did more for art and architecture than anyone else. They showed great ingenuity in getting over difficulties of construction, and a selection of suitable material for the various parts of the buildings. Mr. Fraser goes on to explain the difference between the Roman and Romanesque methods of construction, and shows how the first Romanesque buildings were failures, owing to their constructive faults and how they eventually overcame the difficulties of providing for the thrusts of the vaultings. The author goes on to adduce arguments to show that the reason for the transition from the semi-circular to the pointed arch was not as some people erroneously suppose due to religious influence, but to a revolution in the science of building. In Mr. Fraser's opinion, it is a fallacy to point to Cyclopean experiments of ancient Greeks to support the theory that pointed arches had been constructed in the earliest days of architecture. It is true that the pointed dome was used, but it was not constructed in the scientific way employed by the Gothic builders. The Romanesque architects by experimenting, gathered new ideas which led to new styles, most notable of which is the transition from the circular to the pointed arch. Other theories have been propounded on the origin of the pointed arch, including one in a recent work on Norman architecture by a well-known English writer, who traces it from the Saracens through the medium of the Saracenic-Norman style, but it was afterwards discovered that a similar theory had been advanced long ago. Mr. Fraser sets little store on the question of dates in dealing with the development of architecture, thinking it better to consider the march of the events, the evolution of the periods in a broad-minded way, considering why such changes took place. Most architectural history books give the idea that each style grew out of itself, in its own small sphere. In fact, most architectural writers merely look upon the surface of the various styles and consider only their design and surface ornament.

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* Brief synopsis of an essay by Bright Fraser (Student).

In regard to ornament and general design, Mr. Fraser considers the period of Norman work extremely lacking in graceful design. He traces the development of the doorway from its earliest square construction to the stage at which the opening was stepped, and so became more pronounced, until the circular shaft was developed, and in later styles was separated from the jamb. The piers were also developed in the same way, circular at first, and then developed into the various orders, which were not merely designed, but governed by the number and size of the arches of the vaults, and as the development of the vaulting demanded in course of time less rigid support, the pillars became lighter in construction. They were frequently moulded or channelled with zigzag lines.

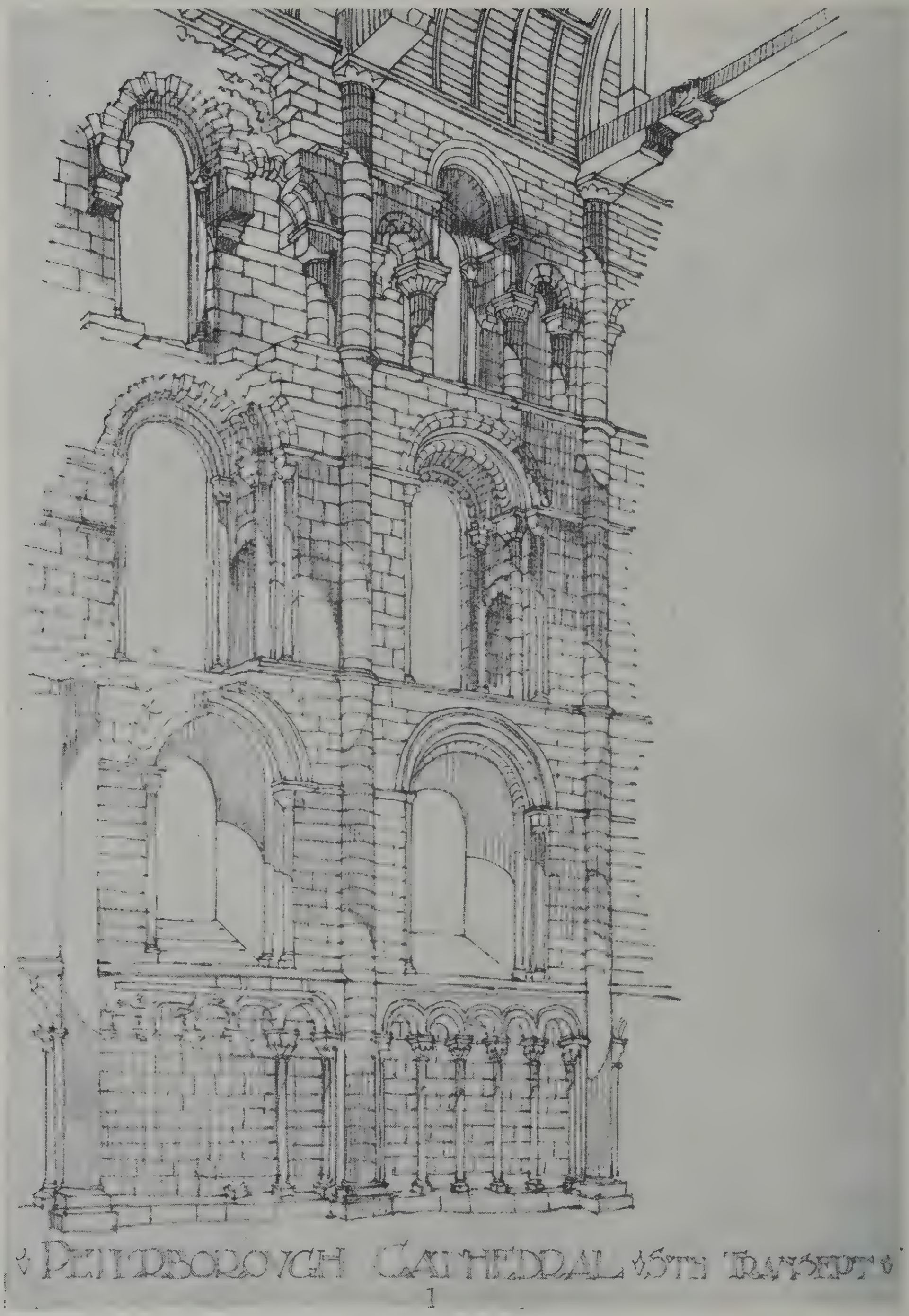
Buttresses were hardly taken into account, there being so little necessity for them, and in design they developed very much on the lines of the door jamb.

The early windows were extremely narrow for climatic reasons as well as owing to the cost of glass. The splay, which was usually twice the size of the opening, was for the diffusion of light within the building. The head of the window was very frequently formed of one stone.

The origin of tracery is found in Norman architecture, and the first development from the single window was a two-light opening, arranged under one semi-circular arch, thus leaving a tynpanum which was pierced in order to give more light.

The author traces the development of the Norman cap, showing that it was a development and not an original design, and shows why ornamental work was attempted, including the endeavour to represent the Ionic capital as for instance in the White Tower of the Tower of London. The ornament was of a geometrical pattern, and a very effective method of ornamentation, and it must be born in mind that it was not until the builders became more confident on the constructional side that they bestowed more time and attention upon ornament.

Mr. Fraser cites among the principal specimens of Norman architecture in England, St. John's Chapel in the Tower of London, the Cathedrals of Norwich, Durham, Oxford, Gloucester, Exeter, Ely, and Hereford, and the Churches of Iffley, at Oxford, and Barfreston Church, Kent. He omits any reference to Southall, and Peterborough, except that in the latter case he makes amends by a drawing here reproduced. In English Norman the nave was considerably longer than in the Saxon period. Transepts were employed and there was usually a tower at the crossing.



Drawn by Bright Fraser.

In Suffolk and Norfolk, the towers were round, this was supposed to be due to Scandinavian influence, but Mr. Fraser suggests that the design was influenced by the custom of building the towers of castles and keeps circular for purposes of defence. The Tower of London is quoted as a good example of a Norman stronghold. As a local example of Norman, Mr. Fraser mentions Birkenhead Priory, which was built in the twelfth century, and 150 years later was replaced by a more ambitious building in the early English style with the exception of the Chapter House. After the suppression and probable demolition of the Church by Henry the Eighth, the Chapel was used for public purposes, until the Parish Church was built in the last century. The Chapter House is a two-story building, the lower floor containing the Chapel and the second floor the Scriptorium.

Mr. Fraser brings his essay to a close with the remark that Norman architecture was a splendid heroic struggle against overwhelming odds, which trained its builders' faculties to a wonderfully high standard, and formed the basis of that magnificent style—the Gothic, which from time to time has been so violated by so-called revivals by men who do not understand its principles.

The Author of the Winning Essay.

Mr. Bright Fraser's professional training commenced under Mr. Harold E. Davies, M.S.A., of Liverpool, in whose office he remained for several years. He is at present an Assistant with Mr. Philip Lockwood, of Chester. Mr. Fraser has been a regular attendant at the local architectural classes, and has won several prizes previously, among them being one in " The Architect's " Students' Competitions.

Sussex Houses of the Archbishops.

Mr. S. W. Kershaw, Hon. M.S.A., in the course of a paper read at the recent meeting of the British Archæological Association, at Amberley, says, a great feature of Church history in the middle ages included the different manors and houses which belonged to the See of Canterbury. These homes became a need for the Prelates, as they journeyed about their diocese, and much business of a religious and secular kind was transacted, as consecrations, ordinations, institutions to livings, and some purely legal matters.

In Kent there were more than twelve houses of the See; in Surrey three, viz., Lambeth, Croydon, and Mortlake; and in Sussex, Mayfield, Slindon, Tarring, Tangmere, and Pagham, besides lands over which the Primates had jurisdiction, as the " Pallant," in Chichester, South Malling, in Lewes, and other districts. Many of these manors were exchanged by Archbishop Cranmer for other lands, and have thus passed out of notice. Others do not exist, while some are ruinous and dilapidated.

Of the Sussex houses, Slindon was the first to fall to the Archbishop, and lying near the coast, was a favourite resort of the Canterbury Prelates in the 12th and 13th century. Stephen Langton, Primate from 1207-1229, built the house at Slindon, and died there in 1229. His successor, John Peckham, often lived there, holding ordinations in his chapel, the usual adjunct to these Episcopal homes.

Slindon passed away from Cranmer's possessions to Henry the Eighth, and afterwards its general features were adapted from episcopal to lay use. Rebuilt in the time of Elizabeth, sweeping changes of the last century left little to remind us of Stephen Langton's favourite home, a spot, according to Dean Hook, where Archbishop Meopham (1328-33), " passed the happiest years of his life."

West Tarring, near Worthing, next claims our notice. Originally given to the See of Canterbury as early as A.D. 940, Archbishop Kilwardly held a court here in 1277. It remains a question whether the rectory house stood on the site of the old manor or that portions of it were merged into the National School buildings. There is a tradition that Thomas à Becket planted fig trees in this district—the area of the manor extended into the parishes of Horsham, Rusper, and Shipley.

Tangmere, another tenure of the See of Canterbury, is situate in the parish of Pagham, near Selsey, and so remained until its exchange in 1542 for other lands. The manor had been held since Doomsday, and in 1204, Archbishop Hubert obtained a grant for a market and fair, as well as a mill, all which formed a source of revenue.

The name of Thomas à Becket is also linked with Pagham, for at the Council of Northampton, in 1164, that Prelate was cited for trial for refusing to pay fees due from this manor. Soon after that Council Becket fled to France, where he entered the Abbey of Pontigny, near Auxerre, whence returning after some years to Canterbury, met with his tragic death in the Cathedral, in 1187.

At Chichester, we recall the name of the " Pallant," a corruption of Palatinate, a district and " peculiar " of the Archbishop. This ancient city claims the birthplace of Dr. Juxon, primate from (1660-3), who rebuilt the great hall of Lambert Palace, and accompanied Charles the First in his last hours at Whitehall. Selsey was the seat of the South Saxon See, till it was removed to Chichester, and at Bosham was born Herbert, the biographer and secretary of Becket, who is buried in the Church there.

Of Mayfield some mention seems fitting to complete the story of these Sussex manors. Mayfield was probably connected with the Manor of Malling, and was conferred by Egbert, King of Wessex, on the See of Canterbury. Archbishop Meopham held an important council here in 1313 for the better observance of holidays and Church festivals, and he died here in 1314, as also his successors, Stratford and Islip. The last-named enlarged this manor house at that time of much architectural merit. The great hall was a striking feature, and a dais at the upper end had a recessed seat for the Primate's throne, used on State occasions—the site of the chapel had also been traced. The rival houses of Lambeth, Otford, and Croydon were rising into favour, and their greater accessibility caused Mayfield to be neglected for a time. When purchased by Sir Thomas Gresham, the merchant prince of London, it regained its ancient glory, and was visited by Queen Elizabeth during her Kentish " progress," in 1573. After Gresham's time it passed to various owners, and became almost a ruin, till its last purchaser, in 1863, the Duchess of Leeds, converted it into a sisterhood, while its ruinous walls were restored under the skill and taste of the late E. Welby Pugin, the well-known architect.

The remains of these old palaces are not without great historic interest, revealing many phases of Church lore, linked with the national life of England. Their architectural annals are also significant—sometimes when ruinous their materials went to the repair of neighbouring Churches !

In their adaptation at different periods, from the feudal and fortress-like character of the early domain to the peaceful home of Tudor days, we can trace the social influences that marked their erection.—From the *West Sussex Gazette.*

The £100 Cottage.

A Business Proposition.

On the invitation of Mr. T. Stewart Inglis, M.S.A., of 15, Copley Park, Streatham, S.W., a party of architects and others interested in the Rural Housing problem, including the President and other Members of the Council of The Society of Architects, and representatives of the Board of Agriculture and the Office of Woods, visited Felbridge recently to see the way in which Mr. Inglis has solved the problem of providing reasonable housing accommodation to the satisfaction of the Local Authority and at a figure which brings the providing of similar houses within the reach of the person with very limited capital.

The Rural Housing problem is an acute one, simply because until now the cost of building and maintenance has been so great that reasonable interest on the capital expenditure could not be obtained.

Reams have recently been written on the subject of Rural Housing, and the concensus of opinion appears to be that to build a cottage for £100 is an excellent ideal to strive after, but hardly one that can become a practical reality. Bitter complaints have been made of the strict Building Laws that hamper the seekers after economy, but after all these same Bye-laws have been framed after careful consideration for the benefit of the community and specially of those who can only afford to pay a low rent.

It is a pleasant motor run on a fine afternoon through Croydon, Purley, and Godstone, and so to the open country, passing many a cottage, whose picturesqueness is probably only equalled by its inconveniences. These will not serve the present somewhat exacting generation, and we are wondering how the two essentials can be combined, viz., efficiency and economy when, turning sharply to the right, at the Star Inn, on the outskirts of East Grinstead, the site is reached. Here is seen a pair of semi-detached cottages soundly constructed in brick with tiled roofs, of pleasing elevation, having little painted woodwork and consequently little outlay in upkeep, erected by contract at a cost of £224 the pair. Who would think these had been built to prove how economically a cottage could be erected? Here is materialized the well-thought-out design of the artist, where each feature, whilst lending harmony to the whole, serves its own useful and carefully considered purpose in the construction of the building.

On entering it is found that no space is wasted by a cramped and mean passage way. The front door opens direct into the living room, though any discomfort which might be expected from this reversion to the old-fashioned type is cleverly avoided, and with the help of a curtain rather adds to than detracts from the general comfort of the room. This living room is of ample size, being 15 ft. by 12 ft., fitted with a range and three large cupboards. The scullery, 10 ft. by 7 ft., opens out from this and besides being provided with fireplace, sink, copper, shelves, etc., there is a large store cupboard and a well ventilated larder.

The advantage of having one spacious living room rather than two smaller ones is obvious, provided that a scullery of sufficient size, such as is here provided, is available, where most of the cooking, etc., can be done.

Experience shows that when the size of the living room has been unduly sacrificed to squeeze in that apartment known as the " best parlour," this room is rarely used or even aired, except on high days and holidays, and then it proves far too small for more than two or three people to occupy with comfort.

The coal store is under the main roof, the w.c., and a store for wood or tools being in an outbuilding approached externally by a paved path protected from the weather.

There are three bedrooms, about 15 ft. by 11 ft., 11 ft. by 8 ft., and 9 ft. by 8 ft., respectively ; all on the first floor. Two of the rooms are fitted with fireplaces, and all contain hanging cupboards.

A careful examination of the cottage shows that strict attention has been given to the needs of intended occupiers. All the fittings necessary to comfort have been provided, though from foundation to chimney-pot the building has been planned strictly on utilitarian and economical lines. The general effect both internal and external is homely and attractive.

Every detail has been carefully thought out, even to the last nail ; the size of the rooms, the spacing of the joists, etc., are all governed by stock sizes and lengths of timber, and other materials, resulting in an absolute minimum of labour and no waste of materials.

Now it is all very well to tell a person that such a cottage was built for £112, but one must go further and find a builder who is willing to put up more houses at the same price.

It is understood that a tender of £100 per cottage from the same builder (Mr. Midmer, of East Grinstead), has been accepted for another pair to this identical design and specification, with the addition of a bath and table top in the scullery, and other improvements in plan and detail. This is a business transaction, where the builder expects to make a fair profit, and where the architect will see that the work comes up to the requirements of the specification.

Copies of the Copyright plans and specifications can be obtained for £2 2*s.* 0*d.*, and there is a license of £1 1*s.* 0*d.* on each cottage erected.

The greatest praise is due to Mr. Inglis, for the very practical manner in which he has tackled this problem, both from the point of view of the architect, the building owner, and the potential occupier, and for the way in which he placed the result of his experience at the disposal of anyone interested in the subject.

Bricks and Brickmaking.

We have pleasure in publishing the following communication from Mr. C. B. Broad : " In the April issue of your *Journal*, under the heading of ' Bricks and Brickmaking,' you have a report of some remarks made by me on the occasion of the reading of a most interesting paper by Mr. Arthur Brown before The Society of Architects. In several little details this report is not correct, and I shall feel obliged if you will permit me to point out one or two important errors. In reference to the process of washed clay I am reported to have said : ' The washing process had the advantage of allowing fixed hack grounds, the difference being that after uncallowing as before, and mixing the ashes with the clay the mixture was conveyed to a mill where it received its first washing.' This is quite incorrect ; in the washing process the clay is run direct into the wash mill and when liquified is conveyed by elevators and troughs into the backs ; chalk is washed in a separate mill and run into the clay mill, where the clay and chalk slurry are thoroughly mixed. The slurry having been conveyed into the backs, is left to settle and solidify, and when sufficiently solid the ashes are deposited on the surface and intermixed with the clay by turning over. The prepared clay is then run into the pug mills and moulded in the usual way. There is a reference to mixing chalk with lime to produce colour ; this is palpably incorrect, as lime is in reality burnt chalk. Chalk is usually intermixed with the clay for the purpose of improving the colour of stock bricks, but lime is only very occasionally used, and then only to stiffen the clay when in too plastic a condition to be moulded. A reference I made to the specification of picked stocks for facings, and the use of Fletton bricks for internal work as causing a difficulty to the ' brickmaker,' has been reported as ' builder,' a very different meaning. My object in referring to this matter is the difficulty which stock brickmakers experience in the disposal of their bricks other than facings or first and second hard stocks. Architects are practically unanimous in acknowledging the superiority of the old stock bricks for facing purposes, but in allowing Fletton bricks to be used for internal work the stock brickmaker is under a great disadvantage, as by his process of manufacturing it is impossible to make all stocks ; there must be a certain proportion of various grades of inferior bricks, some of which are quite suitable for internal work in any buildings. But if Flettons or wirecuts are used, the unfortunate stock brickmaker is called upon to supply all his best bricks for facing and left with all his inferior bricks on his hands for disposal how and where he may ! "

The Objects and Scope of the Society.

Last January the Secretary read a paper before the Society on its rise and development, and at the same time referred to an explanatory statement which he had prepared of the objects of the Society and the means provided by the Memorandum of Association for carrying them out. The historical record appeared in our March issue and we now publish the statement referred to, for the information of members, potential members, and others whom it may concern or interest.

The objects of the Society and the methods employed in carrying them out are shown by the following clauses from the Memorandum of Association, and the explanatory notes thereon.

> The objects for which the Society is established are the promotion and advancement of Architectural Art and practice, and its Allied Arts, Sciences, and Crafts, and the maintenance of the honour and the interests of the profession of Architecture by the aid of all or any of the following :—
>
> (*a*) To hold periodical or other meetings of the members of the Society, and of the Architectural Profession generally, in London, or any other part or parts of the British Empire, its colonies or dependencies, or such other places, foreign or otherwise, as may from time to time be determined upon.

(*a*) The Society holds monthly meetings for the members, in London, for the consideration and discussion of subjects of general interest, and also, when it is considered desirable, similar meetings are held in provincial centres. It provides the same facilities for its members in South Africa, through the Johannesburg Branch.

> (*b*) To support and protect the character, status, and interests of the Architectural Profession, and particularly of members for the time being of the Society ; to promote honourable practice ; to repress malpractice ; to settle disputed points of practice, and to decide all questions of professional usage or courtesy between or amongst Architects, submitted to the Society, its Council or any Committee thereof.

(*b*) The Society's "Code of Ethics" is a guide to members on questions of professional etiquette. The Practice Committee deals with disputed points of practice, and assists members with advice on such matters.

The Society has a Professional Defence Fund for use in such cases where the Council is advised by its Advisory Committee to take up cases on behalf of members who find themselves involved in legal difficulties, in matters where questions of general principle common to the whole profession are concerned.

> (*c*) To consider all questions affecting the interests of the profession, and to initiate and watch over, and, if necessary, to petition Parliament, or promote deputations in relation to general measures, or other matters affecting the profession or the Society, or any of its members ; to procure changes of law, and to support or oppose alterations therein relating to any matter whatsoever affecting the Architectural Profession or the Society, either directly or indirectly ; and for such purposes aforesaid, to take such other steps and proceedings as may be deemed expedient.

(*c*) The Society has in the past taken measures to oppose Bills in Parliament affecting adversely the interests of Architects, and has by deputation and otherwise, put forward reasons for the amendment of Acts, such for instance, as those relating to Ancient Lights, Copyright, etc. The Society has also taken an active part in the drafting and amendment of such Acts as the London Building Act, and the Model Bye-laws, etc. Its work in promoting Bills in Parliament for the Statutory Registration of Architects is too well known to need comment.

The Society's Local Hon. Secretaries at home and abroad keep the Society in touch with matters affecting the interests of the profession.

> (*d*) To initiate and prosecute and pecuniarily support such legal or other proceedings which the Council for the time being may deem desirable in the interests of the profession, or the members of the Society or any member thereof, and with such object to grant such sums of money out of the funds of the Society as the said Council may deem fit, towards defraying any such legal or other expenses incurred by a member of the Society or any other person or body.

(*d*) This gives the Council the power to devote as much of the Society's funds as it deems advisable for the purposes of professional defence, and is one of the Society's most valuable powers, and one of the members' most practical privileges.

> (*e*) To adopt the seal of, and to take over the whole or any of the assets and liabilities of the unincorporated Association known as The Society of Architects, established 1884, acting under " The Literary and Scientific Institutions Act," 1854, and to adopt all or any of its contracts now existing ; and to enter into such agreements, and to make, do, and execute all such acts, deeds, matters and things as may be necessary for the purpose of taking to and over such assets and liabilities, or adopting any such contracts or any part thereof.

(*e*) This was accomplished by the Incorporation of the Society in 1893, which carries with it the weight of legal authority to act and to carry out the powers reserved to a body incorporated by its constitution, and confers a status upon the members which cannot be acquired by members of a mere voluntary association.

> (*f*) To take any gift, loan or property, whether subject to any special trust or not, for all or any one or more of the objects of the Society, but so that if the Society shall at any time take or hold property subject to the jurisdiction of the Charity Commissioners, the Society shall observe all rules and directions of the Charity Commissioners with respect thereto, and it shall, if required by them, vest such property in special trustees thereof.

(*f*) This enables the Society to accept gifts or loans or other property, and is a most useful provision.

> (*g*) To acquire by purchase, taking on lease, exchange, or otherwise, lands and buildings, and all other property, corporeal and incorporeal, which the Society may from time to time think proper to acquire, for the attainment of all or any of the objects for which it is founded, and which may lawfully be held by them, and as to land, subject

> to the provisions of the 21st section of the Companies Act of 1862, to sell, improve, manage, develop, lease, mortgage, dispose of or otherwise deal with all or any part of such property of the Society; and to resell, under-lease, or sublet, surrender, turn to account, or dispose of such property or any part thereof, and to erect upon any such land any building for the purposes of the Society or any of its objects, and to maintain, alter or add to any buildings erected upon any such land or other property of the Society.

(*g*) The Society has acquired its own premises at 28, Bedford Square, and has the power to deal with such property in any way it may think fit.

> (*h*) To borrow or raise money in such other manner for the purposes of the Society, upon such terms and on such securities as the Society may determine.

(*h*) This enables the Society to raise money on its securities whenever required. It was by this means that the Society was enabled to undertake the purchase and rebuilding of its Headquarters.

> (*i*) To diffuse among the members of the Society, and any others deemed expedient, information on all matters affecting the Architectural Profession, and its allied Arts, Sciences and Crafts, or any other information which may be thought desirable.

(*i*) This is done by the publication of the Society's monthly *Journal* of 40 pages, containing the Proceedings of the Society and much other useful information. The *Year Book* of the Society contains the Official Register of Members and other details. Both these are issued free of charge to members.

> (*j*) To grant sums of Money out of the funds of the Society for the promotion of the Architectural and allied Arts, Sciences and Crafts, in such manner as may from time to time be determined upon, and to contribute to any benevolent fund, from whence may be made donations or advances to deserving persons who may be or have been engaged in the Architectural Profession or its allied Arts, Sciences or Crafts, or dependent upon any person engaged therein, and to contribute to or otherwise assist any charitable or benevolent institutions or undertakings.

(*j*) The Society has from time to time granted sums of money out of its funds to the Architectural Association, the International Congress of Architects, the Architects' Benevolent Society, the Architects' Approved Society (National Insurance), the Beaux Arts Committee, etc., etc.

> (*k*) To improve and elevate the technical and general knowledge of persons engaged in, or about to engage in, the Architectural Profession, or any employment connected directly or indirectly therewith; and to provide for the delivery of lectures and the holding of classes, and to test by examination or otherwise the competence of such persons; and with such object to award prizes, certificates, and distinctions; and to make, institute, and establish scholarships, grants, rewards, and other benefactions; to establish and maintain in London or elsewhere in the United Kingdom, its colonies, or dependencies, libraries and museums of models, designs, drawings, and such other things as may be deemed of interest to the members of the Society, and lecture and

> class-rooms or other institutions; to institute lectures or courses of lectures; and to establish schools, for the study of Architecture or its allied Arts, Sciences, and Crafts, in England or in any country where the Society may have a branch establishment. Provided that the Society shall not grant any certificate of any kind as to competency or skill, unless there is on it a statement to the effect that it shows the result of an examination held on behalf of the Society, or that it is merely a certificate of the Society, and has no special effect under any statute or charter.

(*k*) This enables the Society whenever necessary to become a teaching as well as an examining body. The Society has established studentships, scholarships and other benefactions for the benefit of its members, and devotes part of its funds to the encouragement of architecture generally. The establishment of the Beaux Arts Committee to promote improved methods of architectural training in Britain, is an instance of the Society's work in this direction.

The Society possesses a Circulating Loan Library of modern architectural works, which may be borrowed through the post by Country Members. Books in the Reference Library may be consulted at Headquarters. A catalogue of the Loan Library is supplied to members free of charge.

> (*l*) To arrange and promote the settlement of disputes by arbitration, and to act as or nominate arbitrators and umpires, upon such terms and in such cases as may be deemed expedient.

(*l*) This gives the Society power to act as or nominate arbitrators for the settlement of disputes.

> (*m*) To provide for and facilitate in any way deemed expedient social intercourse between the members of the Society and their friends, and, if thought desirable, to provide all or any of the usual privileges, advantages, conveniences and accommodation usually accorded in a social club.

(*m*) The Society's Headquarters provide many of the privileges and advantages of a social club. There are facilities for reading and writing, interviews with clients, arbitrations, etc., and all the professional journals are available.

> (*n*) To organize and hold congresses and promote excursions for the consideration and discussion of all subjects and objects deemed of interest to the members of the Society, or the Architectural Profession generally; to hold Architectural and other exhibitions of objects, apparatus, and appliances, in any way connected with land or buildings, or the profession of Architecture, its allied Arts or Crafts, and to award medals and certificates of merit for any such objects, apparatus, and appliances, in cases which the Society deem worthy of such recognition.

(*n*) The Society was the first to organize an Architectural and Building Exhibition in London, in 1885, and since then has frequently co-operated in promoting similar Exhibitions. It organizes meetings and excursions to different parts of the country, of architectural interest, and sends delegates to all the more important congresses held by kindred institutions.

> (*o*) To issue, edit, publish books, pamphlets, maps, drawings, or any literary matter relating to or in any way directly or indirectly connected with Architecture, its allied Arts, Sciences, or Crafts.

(*o*) This again relates to such publications as the Society's *Journal*, and various pamphlets issued from time to time by the Society, such as the verbatim report of the House of Lords decision on Ancient Lights in the case of *Colls* ats *The Home and Colonial Stores, Ltd.*

> (*p*) To endow and receive property for the endowment of schools, libraries, or other institutions as aforesaid, and to grant scholarships and other rewards to successful students, and to organize and appoint proper persons for the management of such institutions as aforesaid, as the Society may think fit.

(*p*) Under this clause the Council have power to grant scholarships and to generally promote educational facilities in schools, etc.

> (*q*) To remunerate the Officers, Lecturers, Instructors, Teachers and any others, in good faith, for their services in connection with the Society, or any such institution as aforesaid, and to do any or such other things to further the spread of Architectural Art, its allied Arts, Sciences, and Crafts.

(*q*) This authorizes the Society to pay for any services rendered to the Society, or to any Institution with which it is connected, and gives it very wide powers regarding its undertaking to assist in the spread of architectural art, etc.

> (*r*) To do any other lawful acts or things which may be considered necessary to attain, any or all of the above objects.

(*r*) This confers very wide powers and gives the Society permission to do anything lawful in order to attain any of its objects. These powers are such as are of very much wider scope than would be the case, were the Society incorporated by charter, and its powers limited accordingly.

Qualification for Direct Membership.

Architects who are not less than 30 years of age, and who have been engaged in the practice of Architecture as Principals for at least seven years, or as Assistants and Principals for at least ten years, are eligible as candidates for Membership, provided they are otherwise qualified. It is open to any eligible candidate who can satisfy the Council of his qualifications by the production of sufficient evidence of Architectural training, ability and professional standing, to be nominated. Election is by ballot of the Members.

South African Branch.

There is a very active Branch of the Society established at Johannesburg which makes its influence felt in professional matters in South Africa. It was largely due to the efforts of the Branch, supported financially and otherwise by the Home Council, that the Transvaal Architects Registration Act was passed.

Scope.

The Society has a total membership of upwards of 1,200, extending over every part of Britain, and also to many distant parts of the Empire.

Membership Fees.

The entrance fee is £2 2s. 0d., and the Annual Subscription £2 2s. 0d. Subsequent annual subscriptions become due on 1st November.

Register of Students.

Persons above sixteen years of age, who are following or preparing to follow the profession of an Architect, are eligible as candidates for admission to the Register of Students. Election is by the Council, subject to such regulations as they may from time to time prescribe.

Examinations.

There is not at present an entrance examination, but Students are required to present themselves for the Graduateship or Membership Examination before the 31st of October following their twenty-fifth birthday, otherwise their names are liable to be removed from the Register.

Studentship Fees.

The Entrance Fee is ten shillings and sixpence, and the Annual Registration Fee ten shillings and sixpence.

Register of Graduates.

Graduates must be persons who at the time of their election are Architects' articled pupils or assistants, or who are undergoing some other course of Architectural training recognized and approved by the Council. They must be above nineteen years of age and have passed the qualifying examination for Graduateship of the Society, or such other examination or examinations as the Council may from time to time approve in lieu thereof. Election is by the Council, subject to such regulations as they may from time to time prescribe.

Examinations.

Graduates are required to present themselves for the Membership Examination before the 31st of October following their thirty-first birthday, otherwise their names are liable to be removed from the Register. The Membership Examinations are held twice a year in London and the Provinces.

Graduateship Fees.

The Entrance Fee is one guinea, and the Annual Registration Fee one guinea.

Privileges of Graduates and Students.

Graduates and Students receive the publications of the Society, have the use of the loan and reference library, and share other privileges of membership, but are not qualified to hold office or to have a vote or any voice in the administration or conduct of the Society's affairs.

They have special privileges in connection with the Society's examinations and the right to compete for the Awards offered annually by the Council, which are as follows :—

THE EXAMINATIONS. Gold, Silver and Bronze Medals, and Certificates of Merit and Efficiency.

THE TRAVELLING STUDENTSHIP, value £25 and a Silver Medal.

THE ARCHITECTURAL SCHOLARSHIP, value £10.

QUARTERLY COMPETITIONS, in Design, Essay Writing, and Measured Drawings. Prizes value £3 3s. 0d. and other awards.

For further particulars, nomination forms, examination syllabus, etc., application should be made to the Secretary at the offices of the Society, 28, Bedford Square, London, W.C. Telephone: "Gerrard" 942. Telegrams: "Crypt," Westcent, London.

Officers of The Society

	President.	Vice-President.	Hon. Treasurer.	Secretary.
1884	Col. C. O. Ellison	H. R. Gough	C. H. Searle	G. A. T. Middleton, A.R.I.B.A.
,, 5	H. R. Gough, F.R.I.B.A.	J. J. Lish	,,	,,
,, 6	,,	J. J. Lish W. H. Seth-Smith	,,	,,
,, 7	J. J. Lish	W. H. Seth-Smith E. C. Allam	,,	,,
,, 8	W. H. Seth-Smith, F.R.I.B.A.	E. C. Allam R. Walker	,,	,,
,, 9	R. Walker, A.M.Inst.C.E.	E. C. Allam J. Hicks	,,	,,
1890	,,	E. C. Allam G. S. Bridgman	,,	,,
,, 1	W. H. Seth-Smith, F.R.I.B.A.	G. S. Bridgman E. J. Hamilton	E. Tidman	,,
,, 2	R. Walker, A.M.Inst.C.E.	E. Day E. J. Hamilton	,,	,,
,, 3	G. Highton, F.R.I.B.A.	G. E. Baines E. J. Hamilton	,,	A. Montifiore
,, 4	E. J. Hamilton	E. Day B. Fletcher	H. G. Quartermain	,,
,, 5	,,	T. W. L. Emden S. Trevail	,,	,,
,, 6	R. Walker, A.M.Inst.C.E.	H. Lovegrove T. W. L. Emden	,,	M. Baldwin, M.A.
,, 7	T. W. L. Emden	Major Leslie S. Trevail	,,	,,
,, 8	,,	Major Leslie S. Trevail	,,	C. McArthur Butler, F.C.I.S.
,, 9	,,	Major Leslie S. Trevail	,,	,,
1900	,,	Major Leslie S. Trevail	,,	,,
,, 1	S. Trevail, F.R.I.B.A.	W. W. Thomas G. Gard Pye	,,	,,
,, 2	,,	W. W. Thomas G. Gard Pye	,,	,,
,, 3	W. W. Thomas	A. E. Pridmore G. Gard Pye	,,	,,
,, 4	,,	A. E. Pridmore G. Gard Pye	B. R. Tucker	,,
,, 5	A. E. Pridmore, F.S.I.	G. A. T. Middleton R. F. Vallance	,,	,,
,, 6	,,	G. A. T Middleton R. F. Vallance	,,	,,
,, 7	R. F. Vallance, F.R.I.B.A. E. J. Hamilton	G. A. T. Middleton G. E. Bond	,,	,,
,, 8	G. E. Bond	C. James P. B. Tubbs	,,	,,
,, 9	,,	J. W. Dyson P. B. Tubbs	Prof. H. Adams, M.Inst.C.E.	,,
,, 10	,,	A. J. Murgatroyd P. B. Tubbs	E. J. Sadgrove, F.R.I.B.A.	,,
,, 11	,,	E. C. P. Monson P. B. Tubbs	E. J. Partridge, F.S.I.	,,
,, 12	P. B. Tubbs, F.R.I.B.A.	R. G. Lovell E. C. P. Monson	,,	,,
,, 13	,,	R. G. Lovell E. C. P. Monson	C. E. Jackson	,,

of Architects, 1885 to 1914.

Hon. Auditor.	Hon. Secretary.	Hon. Corresponding Secretary.	Hon. Librarian, Inst. 1904.
E. J. Payne	—	—	
,,	E. Farman	C. S. Peach	
,,	,,	,,	
,,	,,	,,	
,,	,,	,,	
,,	,,	C. E. Gritton	
,,	,,	,,	
W. Allport	,	,,	
S. C. Johns	,,	,,	
R. Cruwys	E. Marsland	,,	
S. C. Johns	,,	Major Leslie	
W. R. Mallett	,,	,,	
,,	,,	,,	
,,	,,	E. Farman	
,,	,,	,,	
J. R. Manning	,,	,,	
,,	,,	W. Cooper	
J. Bartlett	,,	,,	
,,	,,	W. R. Mallett	
,,	,,	,,	
,,	,,	,,	R. G. Bare
,,	,,	,,	,,
,,	,,	,,	,,
E. J. Sadgrove, F.R.I.B.A.	,,	*Discontinued* 1907	,,
T. R. Richards, F.R.I.B.A.	,,	———	C. H. Mead
Ellis Marsland	Col. Leslie		,,
,,	,,		,,
,,	,,		G. A. T. Middleton, A.R.I.B.A.
,,	,,		B. R. Tucker
,,	,,		Prof. H. Adams, M.Inst.C.E.

Mainly about Members.

The foundation stone of a new Synagogue in Eskdale Terrace, Newcastle-on-Tyne, has been laid. The architect is MR. MARCUS K. GLASS, East Parade, Newcastle.

The foundation stone of the new Church for Edenderry was laid recently by the Bishop of Kildare and Leighlin. The Church is in the Romanesque style, and consists of nave, aisles, transepts, chancel, tower, and sacristy. The total length is 160 ft. and the width across transepts 94 ft. The square tower, with pyramidal stone roof, is placed at the west end, and rises to a height of 90 ft. from the ground. Messrs. ANTHONY and W. A. SCOTT, of Dublin, are the joint architects.

The Countess of Darnley recently laid the foundation stone of the Lady Chapel and Vestries of St. Barnabas Church, Gillingham, Kent. This portion will complete the building, of which the nave and aisles were erected in 1889, and the chancel and organ chamber in 1900. The design is Early English Gothic, in keeping with the existing work, and is being carried out in local dark red bricks and Bath stone from the Monks Park Quarries. The architects are Messrs. Cutts, Davis, and BODDY, of Southampton Street, Strand, W.C.

MR. MOSES J. H. SOMAKE has been appointed architect for the building of new offices for the British India Steam Navigation Company, for Karachi, estimated to cost about two lakhs of Rupees. A preliminary design has been approved and submitted to head office. It is hoped that building operations will be taken in hand very shortly. The Karachi Port Trust have also approved of Mr. Somake's design for the style of Facades to be adopted for the building of Willingdon Place, in Karachi, lately opened by His Excellency the Governor of Bombay. This design was placed before His Excellency and publicly exhibited and highly commended upon.

St. Martin's Church, Overstrand, near Cromer, a 14th century Church, which has long been an ivy-clad roofless ruin, was rededicated by the Bishop of Norwich last week, after having again been rendered serviceable for worship. In the course of the work many features of interest were discovered, and have been retained. What remained of the old north porch has been taken down and re-erected on the south side, a new approach from the road having been made directly opposite the entrance. The Church is lighted by gas and provided with hot water apparatus. The work has been carried out under the direction and personal supervision of Messrs. LACEY and Upcher, architects, Norwich.

The New Centre for Domestic and Manual Instruction, Glass Street, Hanley, Staffs., occupies a central site opposite the Central Council Schools for the whole of the Hanley District. The buildings are in two blocks. At the lower extremity of Glass Street is the manual centre, consisting of a large room for forty scholars, a master's room, wood store, lavatory, cloakroom, etc. The domestic centre is a two-story structure, with its main entrance on the easterly side. On the ground floor are a laundry room, with an adjacent drying room, cookery room, and larder, two cloak rooms, teachers' room, and general lavatory; and on the first floor, which is reached by means of a spacious staircase, there is another room for cookery, with a larder adjoining and a suite of rooms for the teaching of housewifery, comprising a parlour, kitchen, scullery, bedroom, and w.c., which are furnished on the lines of an artisan's dwelling. The staircase and landing are lighted by a dome, and all the rooms have cross ventilation. The manual room has a north light. Each cookery room has a "Gradient" range and two gas stoves, and the laundry room has a gas clothes boiler and a gas iron heater. The buildings are heated on the low pressure system and the lighting is by electricity. The design is of Georgian character. The external cornices are all in wood and the curved pediments are covered with asphalte. The architect is MR. S. B. ASHWORTH, of Hanley.

Meetings and other Fixtures, 1914.

DATE		TIME.	OCCASION.
JULY	31st.	6 p.m.	Last day for depositing Quarterly Competition Drawings.
OCT.	1st.	4 ,,	Council Meeting to receive Nominations for House List.
,,	15th.	4 ,,	Committees and Council.
,,	,,	8 ,,	Members' Meeting. Presentation of Students' Prizes. End of Session.
,,	31st.	6 ,,	Last day for depositing Quarterly Competition Drawings.

Special General Meeting.

A Special General Meeting of The Society of Architects will be held at 28, Bedford Square, on Thursday, October 15th, 1914.

Agenda :—

1. Minutes.
2. Scrutineers' Report on the Ballot for Officers and Council, 1914-15.
3. Nominations and Announcements.
4. Presentation of Students' Prizes.

Papers for Session 1914-15.

The Council invite suggestions for making the Ordinary Meetings more attractive and useful to the members. They will be glad to receive offers of papers or suggestions for subjects for discussion. One proposal that has been made is that the meetings should commence at 7.30 p.m. It may be pointed out to potential readers of papers that there is every facility for the display of lantern slides and diagrams, the papers are printed in advance to facilitate discussion, and every thing possible is done to contribute to the convenience and pleasure of members and visitors attending the meetings.

The Membership.

Elected.—William Henry Adams, Romford; Percy James Bartlett, London; Harold Percival Binks, Hull; James Brown, Shrewsbury; Alfred Henry Durnford, London; Arthur Easton, Hull; Gerald Montague Hedley, London; Edward de Wilde Holding, Northampton; Gordon Arthur Joslin, London; Herbert Thompson Rainger, Cheltenham; Matthew Steele, Bo'ness; Philip Francis Story, Kingston-upon-Thames; Edward Whitwell, Abersychan. *Members.* R. M. Fulton, Forres, *Student.*

Resigned.—E. J. Bettington, Hereford, *Member.* H. M. Jeffreys, Bridgwater, *Student.*

Reinstated.—George Baines, F.R.I.B.A., London.

Tranferred to Retired List.—Rev. E. P. Laycock, British Columbia.

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The Society is not, as a body, responsible for the opinions expressed by individual authors and speakers.

Charter Proposals.

The Charter proposals of the R.I.B.A. Council having been adopted by the general body of members, are to be submitted to the Privy Council for approval on general lines, and to come back to the members for final consideration on certain points before the official petition for the new Charter goes to the Privy Council.

The outgoing Council have secured their object at the eleventh hour, and in doing so, have saddled the new Council with the carrying out of a scheme which presumably they object to in principle, most of them having been returned on the Statutory Registration ticket.

Already there is evidence of further opposition from within as well as from outside the Institute. Questions of alleged irregularity of procedure in issuing notices to members, signs of counter petitions to the Privy Council by the Licentiates, a number of whom talk of resigning and joining forces with the Society. Further demands, particularly from Ireland, for information regarding the Society's Bill.

The Licentiates in the Sheffield District have held several meetings to discuss the best means of guarding their professional interests in the Institute, and have decided to petition the R.I.B.A. to modify certain clauses in the proposed Charter, and if necessary petition the Privy Council against the proposal in its present form. They invite the moral and financial support of other Licentiates to their action. They were also instrumental in getting a question asked and answered in Parliament on July 16th as to whether the R.I.B.A. had lodged their petition, and what procedure should be followed by persons interested who wished to oppose it.

So far as we are aware at the time of going to press, the R.I.B.A. petition has not yet been lodged with the Privy Council. Should such application be made, notice will be given in the *London Gazette*, and counted petitions can then be lodged. The original and any other petitions are referred by His Majesty to a Committee of the Lords of the Council for consideration, and report.

The Licentiates are evidently beginning to realize their position, and that union is strength. At present the balance of voting power is with the Associates who can control the Institute if they choose to do so. The Licentiates are numerically almost as strong as the rest of the Institute put together and they contribute upwards of £2,000 per annum to its funds. At present they have no vote, but they have an influence which the Institute cannot afford to disregard if it has any respect for its own material prosperity, or any wish to settle the present difficulty and get on with other and probably more congenial work. What may be termed Licentiates' Defence Committees have been formed in London and Sheffield.

A circular issued by Earl Ferrers, Messrs. Ralph Knott, S. W. Neighbour, J. Briggs, Arthur B. Hayward, Reginald C. Fry, and Rob. Robertson, expresses the view that if the present R.I.B.A. proposals for a new Charter are allowed to receive Royal sanction, they will probably have a baneful effect on the future of architecture, and will undoubtedly damage the professional prospects of those who do not happen to be Fellows or Associates of the Institute.

The name "Chartered Architect" has been selected as likely to impress the general public with the superiority of those entitled to use it, and its use is to be reserved for full members of the Institute. It cannot be maintained that these men are all better architects than those outside their ring. But they are Fellows or Associates of the Institute, and simply as such they are to be given a preferential status.

Having divided off the goats and branded them as "Registered Architects," the sheep propose not only to be absolute masters of their own fold, but to control the entrance to the meagre pasture still allowed to the goats. The *whole* of the Executive Council which can register or refuse to register an architect, is to be in their hands, and even on the advisory body, which is to have no power at all, the representation of outside architects is to be farcically small. A privileged status is apt, in the long run, to breed narrow class prejudice, and this power of exclusion may have disastrous effects on the future of British Architecture.

The circular suggests that the general body of architects have no organization to express their opinion on this matter, but as some of the Licentiates are talking of joining forces with the Society, there is evidently some feeling in favour of making use of an existing organization and machinery.

Our contemporary, the *British Architect*, which is always consistent in its views on Registration, says, the creation of a Licentiate Class contributing 2,000 guineas per annum to the funds of the Institute we have always held to be a great mistake. And it has been a matter of amazement to us that so many architects were willing to enroll themselves into a class which marked them down as in an inferior rank. And now, apparently, we are to have Chartered Architects and Registered Architects. It is little wonder that the goats having been divided off from the sheep, are inclined to object. There would, we presume, also be outside architects (?), who were neither Registered nor Chartered, and it is quite safe to assume that this class would include men who would confer distinction on the profession, whilst absolutely refusing the so-called distinction of the chartering or registering processes.

There is a widespread misconception of the architect's right position, and a distinct lowering of the ideals which ought to govern it, and all these increasing entanglements between the various views of the various members of the profession are still further obscuring the vital matters of an architect's work under a cloud of trades-union aspirations. According to the circular before us " neither Licentiates of the R.I.B.A. nor the general body of architects have any organization to express their opinions." If that is so, what has become of the effort to unite the whole profession into one common fold of Trades Unionism ?

There is only one remedy. Let us create a Registered and Protected Body of Building Surveyors, who must all be examined and properly numbered. Then into this body everybody can come, whether from the Institute or The Society of Architects, or from outside. And this Trades Union body would pay well. It could look after its members and fight their battles. It is probable that a very large number of the public would employ them as architects. Then some real distinction would be left for those (and they are not a very large number) who practise the Art of Architecture. And the answer would be provided for those distinguished architects who propounded the question, " Is architecture an art or a profession ? "

We suggest that architecture is an art, and as those who practice it profess themselves to be qualified to do so and call themselves professional men, it is also a profession, even if only a self-styled one, without legal status or recognition.

More Registration.

In the course of a leading article, *The Architect and Contract Reporter* says, not only is there now before Parliament the Bill for the registration of architects promoted by The Society of Architects, but the present session has seen introduced the Auctioneers and Estate Agents' Registration Bill—" A Bill to provide for the establishment of a Register of Persons practising as Auctioneers or Estate Agents dealing with real estate, and for other purposes connected therewith." " The Bill proposes *inter alia* after the expiration of a period which will enable duly qualified persons to be entered on the register, to prohibit unregistered persons (with certain exceptions) from acting professionally as valuers or auctioneers of land or buildings."

Now inasmuch as every time an architect in the usual practice of his profession issues a certificate for payment of money to a contractor for work done either during the erection or at the completion of a building, he acts professionally as valuer of a building, it would appear that unless he is included within the " certain exceptions," he could, if the Bill became law, no longer perform the duties usually rendered by an architect, unless he were a " registered auctioneer " or a " registered estate agent." Not only is an architect a valuer of buildings when he grants a certificate for payment to a builder, but the schedule of charges of the Royal Institute of British Architects recognizes that the valuation of real property for advances upon mortgage and other purposes is work that may properly be undertaken by members of the Royal Institute.

The " certain exceptions " previously referred to are those entitled to make valuations or to sell by auction under some other Act ; solicitors and such accountants, architects or engineers as belong to certain specified societies, which are set out in the schedule attached to the Bill as the Institute of Chartered Accountants in England and Wales, the Society of Accountants in Edinburgh, the Institute of Accountants and Actuaries in Glasgow, the Society of Accountants in Aberdeen, the Institute of Chartered Accountants in Ireland, the Society of Incorporated Accountants and Auditors, the Royal Institute of British Architects, The Society of Architects, the Institution of Civil Engineers, the Society of Engineers (Incorporated).

If this Bill becomes law, no architect who is not a member of either the Royal Institute of British Architects or The Society of Architects would be allowed to make a valuation of real property, land or buildings, " for or in consideration of any payment or other remuneration, whether monetary or otherwise," unless he were a registered auctioneer or a registered estate agent. There is a large number of architects who are not members of the Royal Institute of British Architects or The Society of Architects, and all of them have to make valuations of buildings in the ordinary course of their practice, and many make valuations of real property for mortgage and other purposes. These therefore are vitally affected by the proposed Bill.

It is, we think, perfectly clear that a very large number of architects will be prejudicially affected if this Bill becomes law, and gives power to the Auctioneers and Estate Agents' Institute of the United Kingdom and the Surveyors' Institution to prohibit from making valuation of real property any but their own members and those whom they may see fit to admit to their register. There is no doubt that valuations for mortgage or compensation would be thus affected, and what is for architects of even more importance the making of valuations for certifying payments to builders would, in our opinion, be also affected. If, for instance, the case came before the High Court there could scarcely be a doubt that buildings, whether completed or partly constructed, are real property, and that before an architect can certify for payment he must make a valuation. The fact that the work of an architect includes the valuation of real property within the meaning of the Act is further shown to be recognized by the promoters of the Bill, inasmuch as it is specifically provided that members of the Royal Institute of British Architects and of The Society of Architects shall be exempt from the operations of the Act. Architects who do not belong to either of those bodies must therefore, if the Bill becomes law, reconcile themselves to being registered as auctioneers or estate agents and paying an additional tax in the shape of registration fee and annual licence, both of which are provided for in the Bill, with power for the board to fix a differential scale of fees for members of the two promoting institutions.

Daylight Illumination of Schools.

The Illuminating Engineering Society have issued an interim report on this subject, the conclusions arrived at being summarized as follows :—

> No place is fit for use in a schoolroom when diamond type cannot be read easily by a normal observer at a distance of half a metre (20 inches).
>
> The darkest desk in any schoolroom should receive an illumination equivalent to that derived directly from 50 reduced square degrees of visible sky. In these circumstances the place should receive not less than 0.5 per cent. of the unrestricted illumination from the complete sky hemisphere.
>
> The windows should be located in the wall to the left of the pupils, and the glass should be carried to the ceiling and not interrupted by cornices, pillars, or decorations.
>
> No desk in a schoolroom should be farther from the window wall than twice the height of the top of the glass above the desk surface.
>
> The ceiling should be white. The wall opposite to the window and the wall behind the children should be lightly coloured from 30 inches above the desk level. The wall around or behind blackboards should be somewhat darker than the rest of the room.
>
> All furniture, desks, and surfaces in the lower part of the room should be finished in an unobtrusive colour, dark shades and black being avoided.

The Profession in South Africa.

A Pessimistic View.

The President of the Federated Master Builders of South Africa, in the course of his Presidential address, is reported by *The African Architect* to have stated, that it is to be regretted that more cohesion is not shown in the ranks of the architectural profession, that there is not the same unity of views amongst architects that there is amongst builders, and that if the members of the profession in South Africa followed the builders' lead in reconciling divergent views and universal conditions of contract on a broad and liberal-minded basis, it would be to the benefit of not only the architect, the surveyor, and the builder, but would also be of infinite benefit to the client. There has been prolonged discussion on the question of the Registration Act, and, it seems that the members of the architectural profession are endeavouring to get to the summit of the hill by different roads. We suggest to the architects that they sink personal views as far as possible, and endeavour to attain their object by a mutual and combined effort, through which not one of them would lose personal dignity. . . . .

In the course of a discussion about Uniform Conditions of Contract, Mr. Woods (Johannesburg) said no one would welcome more than he the idea of getting uniform conditions of contract in South Africa, but he must point out the difficulties with which they were faced, particularly in getting the architects to agree, seeing that there was no organization of architects for the whole of South Africa to agree for them as a whole. If they were going to put these conditions of contract into the melting pot and produce something that would be for the good of them all, then they must get some guarantee that the architects of South Africa were going to abide by them. There was more jealousy and more petty spite and personal feeling among the architects of South Africa than among any other body of men in the world, and until they had got some reasonable hope that the architects generally would sink their personal differences and professional ill-feeling it was almost hopeless to expect that they would get uniform conditions of contract throughout South Africa. . . . .

The Capetown Master Builders' Association draw attention to the large number of architects who are issuing quantities of the most unsatisfactory nature.

It appeared that, notwithstanding the fact that the model bill of quantities has been adopted by the majority of architects and administrative bodies in the Union of South Africa, there are still quantities being issued of a most unsatisfactory nature, and it was resolved, that each local house report practising architects departing from the model bill to the General Executive, who will take every means to induce general adoption.

The African Architect in a leading article says, certain Master Builders appear to have spoken with great candour—and little pleasantness—of their over-lords and directors, the architects. Uniform conditions of contract and a standardized system of taking out quantities comprise the principal needs of the Master Builders, and are, it seems, urgently required from architects as a matter of fair-play to their business interests Years of representation to the various Institutes of Architects have been fruitless of effect upon the private practising architect, the failure to affect the private architect being attributed to the lack of cohesion in the architectural profession. The manner in which organizations are being managed for architects in the Transvaal, the accusation levelled against us (we wish we could say without justification !) of lack of unity and good fellowship, and the prevalence of a self-seeking spirit, combined with apathy to any matter of general professional welfare, all tend to uncomfortable comparisons. Comparison is in this case truly odious : but more odious still is the prospect of further drift. Whither are we drifting ?

Drifting ? Indeed, we are nearing the end—the break-up and decay of a great profession. Just as a stone, badly weathering, will flake and crumble away, so the profession of architecture shows signs of disintegration. Quantity Surveying, always the work of an expert architect versed in the principles of construction and of mathematics (as was Sir Christopher Wren) has become a distinct profession. Quantity Surveyors to-day have their own Institutes, alive and active in the interests of their members, and keenly resenting the careless measuring systems of certain architects as an amateur encroachment which must now be stopped. The architect of to-day carries out his best work with steel and reinforced concrete, materials the stability of which he is usually incompetent to calculate and which he could not use were it not for the friendly assistance of structural engineers—a further distinct profession—employed by firms commercially interested. This up-to-date class of architect cloaks his ignorance by a pose of Art—Art with a capital " A." The great structural engineers who poised the wondrous mediæval vaulting with such perfect equilibration of rib lierne and buttress had not such lofty souls as this our modern artist-architect. " Art," he will quote to you, " is the soul of architecture," and hence his noble disdain for mathematics, measures and common business methods and ability. The noblest of these imposing—and posing—flowers of Art philosophy, will employ special assistance to write his specification of the mere builder's work (probably evolving yet a further distinct profession).

But is this all ? These are the signs generally visible—the " writing on the wall." But what of the signs applying to the profession in the Transvaal in particular ? Elsewhere salvation would seem not entirely hopeless ; the promotion of collective interests, good fellowship, and mutual instruction may yet retrieve the mistakes and faults of the past. In this Province we have no less than three organizations of architects—the Society, the Institute and the Association. All three appear to have fallen into torpor, and for any information communicated to their members upon —for instance—the reasonable requests of the Builders, those organizations might even be dead.

Weighed, measured and found wanting! Wanting in the spirit of co-operation, wanting in collective spirit, wanting in power of combination, wanting proper guidance and leadership, wanting in all that counts as essential in modern existence, the architect has already disappeared—his profession split up and divided among four or five specialist callings; while he, after becoming less and less a necessity to the building public, has sunk to the position of a mere draughtsman, a producer of pretty designs—with the delivery of which latter his responsibilities cease. A mere draughtsman, with a draughtsman's scale of pay, and only a draughtsman's responsibility.

At this point came the realization that, pondering upon the Congress report, the writer had fallen into a vision. But how much of the dream is true? And has the dream a lesson?

Registration in South Africa.

The Cape Institute of Architects states that the draft Registration Bill is still in the hands of the Association of Transvaal Architects, and will not be presented to Parliament this session. The Council is considering the advisability of acting independently of the Transvaal, and of introducing the Bill into the Senate, which it is advised would be the most expeditious way of getting the Bill through Parliament.

The Council wishes to emphasize the fact that though the Act, when passed, will be for the benefit of all architects, it is the younger members of the profession who will chiefly benefit, as the competition of "makers of plans" will be gradually eliminated.

The President, Mr. F. K. Kendall, F.R.I.B.A., says, as our profession is at present constituted, it must surely have struck all of us, times without number, that we are suffering from want of a properly recognized status and organization, such as exists, I think, in almost any other profession or business; that most of our difficulties with clients or amongst ourselves are directly due to the varied opinions that people hold as to the extent of an architect's duties and remuneration.

There is, for instance, the every-day paradoxical case of the wholly untrained man who is free to practise as an architect, with the gullible employer who can see no difference between him and the highly accomplished practitioner. Or the employer who for choice goes to the poorly-equipped architect instead of a man of standing, under the impression that he will get from him the same work for a lower fee. Or, again, the paradox of the not too conscientious architect, who charges the regular fees—but pockets a very much larger profit—by the simple expedient of not providing his client with properly worked out detail drawings and specifications. And there are many degrees and variations of these undesirable confusions. Gentlemen, surely we are called upon to protect the public from these impositions and misunderstandings, and incidentally to raise the standard of our profession ?

There are architects who, were they able to give the necessary time and trouble to the unravelling of the causes of, and the solutions to, the difficulties before us, could do much to set the profession upon a more equitable basis. But the many have found themselves too much occupied by the immediate calls of their business to carry the work very far.

The reformation is too vast and complex for us to find an " open sesame " method of accomplishment ; and we must realize (1) that while the public will no doubt be grateful to us in a general way for any decided measure of success we may achieve, beyond that they cannot be expected to help us, i.e., we architects must do it ourselves if it is to be done ; and (2) that it is not going to be done in a day, or a month, or a year ; future generations will reap nearly, if not quite, all the ultimate benefits from it. Nevertheless, knowing this, I ask : is it not our duty to do what is in our power to help the movement ? It can only be undertaken successfully by a representative body such as our Institute ; and inasmuch as the more representative we are, the more quickly and thoroughly we can expect to succeed, all architects, both old and young, should support the movement for the common good.

If we are agreed upon the principle—as surely we must be—how can we best accomplish our object ? Let us first take stock. Architects of to-day are men of divers kinds, with divers kinds of training. Consequently they look upon their duties in very different ways. And if these different points of view exist in the profession itself, how is it to be expected that the public should know what an architect is—or should be. Obviously the training must be standardized, and a recognized qualification instituted.

We all know that the Royal Institute of British Architects and The Society of Architects in England have been working for many years in this direction. But the traditions and prejudices of an old country die very hard, and it will doubtless be some time still before they emerge from their present differences. The Transvaal architects must be congratulated upon having passed a Registration Bill through Parliament, so that they have now arrived at a more advanced stage. (A local difficulty has consequently arisen in that a Registered architect in the Transvaal is free to practise in the Cape Province, whilst a Cape Provincial architect may not practise in the Transvaal without becoming registered and purchasing his licence. Although this is obviously unfair, it is one of the unavoidable difficulties which arise at such a stage as this, and it is, of course, only temporary.)

The Government of New Zealand, I believe, has also passed a Registration Bill for architects, and other countries are working in the same direction. Our Institute has worked strenuously for some years to secure registration, but the feat has not yet been accomplished. Much delay has been caused by our endeavour to act with the Transvaal architects, and secure an extension of their Bill to apply to the whole Union of South Africa. They have, however, found certain weak spots in their Act as the result of experience, so that certain modifications appear necessary.

These modifications are still under discussion amongst them. We are, therefore, getting somewhat impatient in the matter, and have now to consider whether it will not be more expeditious to introduce a Bill of our own into the Senate, quite independently of the Transvaal, and the sooner it can be accomplished the sooner will its advantages tell on the many sections of our community affected by it.

Competition Ethics in South Africa.

The competition for the Governor-General's residence at Rondebosch has been the occasion of a considerable disturbance among the architects of South Africa. The wording of the Assessor's report was strongly resented and the award itself objected to. The drawings, after being exhibited in Pretoria and Johannesburg, were to be returned to their owners, but the Council of the Cape Institute were successful in securing them for exhibition in Capetown. The various Architectural Institutes independently remonstrated with the Minister of Public Works, and eventually a deputation, composed of representatives from the Association of Transvaal Architects, the Transvaal, Cape and Natal Institutes, and The Society of Architects, obtained an interview with the Minister and waited on him in Pretoria, when the whole matter of Government competitions was set before him.* The result is that he has promised that if the architectural bodies would appoint an Advisory Board from among their members, he would, in the future, consult that Board and act with them when promoting any public competition.

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* [The full text of this document was published in our issue of March last, page 196 ante.—Ed.]

Royal Sanitary Institute Congress.

The Twenty-ninth Annual Congress of the Royal Sanitary Institute was held at Blackpool from 6th to 11th July, under the Presidency of Lord Derby. The usual health exhibition of sanitary appliances was held in the old Skating Rink and opened by the Mayor of Blackpool. The Congress meetings were well attended, over 200 delegates having been appointed by various Governments, County and Borough Councils, Urban Rural District Councils, Sanitary Authorities, Universities, Institutions and Societies, including The Society of Architects, which was represented by Professor Henry Adams and Mr. Frank H. Gorst.

Among the subjects of interest to architects should be mentioned the discussions on "The Sanitation of the Country House," opened by Mr. Tyndale; "White Lead and its Disuse for Painting," by Sir Henry Tanner; "The Housing of the Agricultural Labourer," by Mr. Searles-Wood; "Standard of an Habitable House in Town and Country," by Dr. Dunne; "Town Planning and Industrial Towns," by Mr. F. W. Platt; "Town Planning and Garden Cities," by Mr. T. G. Lumb; "The Sanitary Side of Town Planning," by Mr. A. J. Price; "House Drainage," by Mr. A. Race; "Economical Supply of Hot Water to Artisan Dwellings," by Alderman H. Burridge, "Some Recent Developments in School Buildings," by Messrs. F. S. Biram and W. B. Fletcher.

The following are summaries of some of these papers :—

The Housing of the Agricultural Labourer.

By H. D. Searles-Wood, F.R.I.B.A.

The Local Government Board issued in 1913 a memorandum with respect to the provision and arrangement of houses for the working classes under the Housing of the Working Classes Acts, 1890 to 1909. The following are summarised from extracts :—

Standard of Construction.—While it is desirable that simplicity of design and economy in construction and general arrangements should be aimed at, houses erected by a local authority ought generally to be such as will be a model or standard for those which may be erected by private owners.

Moreover, if a local authority propose to borrow money to defray the cost of the erection of houses, the Local Government Board, in fixing the period for the repayment of the loan, could not allow the maximum period adopted by them for this purpose, namely 60 years, unless the houses were to be build substantially.

Special circumstances may exist in some cases rendering it desirable for the local authority to construct houses of a less permanent character, and to repay the loan in a much shorter period than 60 years. In considering this point, it is to be borne in mind that taking interest at 3½ per cent., an annuity of £6 0*s.* 4*d.* would repay a loan of £150 in 60 years, £141 in 50 years, £128 in 40 years, or £110 in 30 years.

On the question of the number of houses to be erected on a site, the local authority will doubtless consider it necessary to have regard to the cost of the site and the extent to which street works will be necessary ; but it will be borne in mind that the annual charges in respect of a loan for the land spread over the maximum period of 80 years, would in most cases constitute a comparatively small proportion of the total annual cost of providing the house. On the basis of ten houses to the acre and land at £100 per acre, the loan charges per house for land purchase would be less than 2d. per week.

Buildings in Rows : Back Streets.—Where houses are built in rows it is desirable that they should be set back from the street line, and as a rule the number of houses in a continuous row should not exceed ten or twelve. Back streets may be necessary for the removal of house refuse and delivery of coals, etc., and for the laying of sewers.

Detached or Semi-Detached Cottages.—The erection of detached or semi-detached cottages is somewhat more costly than the erection of cottages in blocks of four or more. Larger ground area and frontage will, as a rule, be more often possible in rural than in urban areas, and where large gardens are provided and a slightly increased rent is charged the tenants should be able to receive some return in the form of garden produce.

Other Arrangements of Houses on Site.—When the by-laws admit, it may be desirable to consider other arrangements of streets and buildings which may reduce the expenditure on land and street construction, *e.g.*, the formation of groups of houses on back land, or round an open space, and the formation of the street which will be the means of approach for vehicles at the back of the houses, leaving a stretch of garden ground between the front of the houses and a footway giving access to their fronts.

In the case of houses containing three bedrooms on the first floor, it is desirable that the frontages should in no case be less than 16 feet.

Working-Class Dwellings.

The type of dwelling adapted to the ordinary working class family of say five to seven persons, should comprise a living room, scullery, food store, three bedrooms, and the necessary conveniences and out offices. In such a house the ordinary necessities would be met by the following arrangements.

Living-room.—The living-room ought to be as large and commodious as possible and should contain a good cupboard and drawer, and a kitchen range with a boiler for hot water supply.

Scullery and Bath.—The scullery may be fitted with a small range or open fire or with a gas stove. A bath fitted with hinged top to form a table when not in use, can advantageously be fixed in the scullery, hot water being supplied to the bath and sink from a copper in the scullery from a tank connected to a small boiler in the kitchen range or from a copper heated by the kitchen range. The provision of a covered space outside the scullery, in which washing can be done and in which the copper can, if desired, be placed, will be found a convenient arrangement.

Food Store.—The food store should be well lighted and ventilated by a separate window opening into the external air.

Bedrooms.—One of the rooms should have a floor area of at least 120 square feet. Bedrooms which cannot be provided with a fireplace should have special ventilation. The doors, windows and fireplaces in the bedroom should be arranged so as to secure convenient spaces for the bed and furniture, and to ensure the freest circulation of air.

Closet accommodation.—A water-closet may be placed close to or build as part of the house, and access to the entrance should be under cover if possible. If an earth-closet is provided it should be placed at some distance from the house.

Coal Store.—A store for coal and fuel should be provided.

Height of Rooms.—The height of the rooms need not exceed 8 feet 6 inches, and 8 feet may suffice with good ventilation.

Staircase.—The staircase should be arranged independently of a living-room, and should be well lighted and ventilated, furnished with a handrail, and be of an easy gradient, with rises not exceeding eight inches, " winders " being avoided if possible.

Windows.—The window area of each room should not be less than one-twelfth of the floor area of the room. The windows should be made to open, and should be so placed as to ventilate the upper as well as the lower portions of the room, and at the same time be sufficiently low down to enable children to see out of them.

HOUSES FOR SMALL HOLDINGS.

The Living Room should be given the preference in the matter of aspect and the most careful attention in planning. The best aspect is towards the south or south-east, though when this aspect cannot be secured, sunshine is of such great importance that a western aspect should be adopted.

The minimum size, 180 feet of floor area, can only be regarded as adequate, if the room is well planned. The best shape is probably not quite square, but for a room of the size stated : about 15 feet by 12 feet. If the fireplace is on one of the short walls, the window should be on the adjacent long wall, and the door or doors should be placed as near as possible to the corner furthest from the fire and window. If the fireplace is in one of the long walls, the room should be made somewhat wider to allow for the projection of the chimney breasts. The fireplace should never be placed immediately opposite the only window, otherwise the housewife will stand in her own light when cooking. The portions of the room about the fire and adjacent to the window should not have to be used as passage ways from one door to another, and special care should be taken to avoid planning doors between the fire and the window. As a rule, one large window is preferable to two small ones, and where there are two, the second should be made quite a minor one. The living-room should be provided with a cooking range, and also with sufficient cupboards and shelves.

The Scullery is best planned either to lead directly from the living-room, or to be accessible immediately outside the living-room door. The aspect should be east, and an entirely sunless scullery is undesirable. The relative positions of doors and windows is of great importance. Many sculleries are of comparatively little use in proportion to their size, owing to the space occupied by swinging doors and passage ways from door to door. Except when a separate outside wash-house is provided, the scullery should contain a copper fitted with some arrangement for diverting the steam into the fire or flue. Space is needed for a mangle or other appliances. When a sink is provided, it should be fixed under or adjacent to the window, and should have space on both sides if possible, or at least ample space on one side for a fixed table or draining-board. A table by the copper is also convenient. Shelves and pegs should be liberally provided.

It is advisable that the scullery should be fitted with a small, simple fireplace or cooking stove. It is important, however, that the scullery should not be so large or be planned in such a way as to encourage its use as a living-room.

The Larder should face north or north-east, or if this cannot be secured, the window should be protected from the sun, and should be so placed that, if the rays of the sun cannot be kept out, they shall not fall upon the shelves where the food is to be kept. Access to the larder may be either from the scullery or from the lobby, as near as possible to the living-room door, or even from the living-room itself. The larder should be well lighted and ventilated, with openings covered by copper wire gauze to exclude flies. If there are adequate ventilating openings near the floor and ceiling, the window may be a fixed light. The space under the stairs, though not the best place for the larder, may be used for this purpose provided it is ventilated properly.

The Staircase may be planned to lead from the living-room,and if it is suitably placed there is no serious disadvantage in this arrangement beyond the fact that it necessitates an additional door in the living-room, which it is desirable to avoid if possible. It is more convenient generally, that the staircase should start from a lobby outside the living-room door, into which lobby the front door would open.

It should not be steeper than 8 in. rise and 9 in. tread, and a proper handrail should be provided. It should always be lighted and ventilated at or near the top by means of a small window that can be readily opened. When there is a turn in the stairs, the landing must not be made too small to allow the passage of ordinary pieces of furniture, or of a coffin, at a complete turn ; when it is not possible to lift things clear of the newel post, it will be found that a clear width of at least 3 ft. to 3 ft. 3 in. should be allowed.

Bedrooms.—The desirable standard is a minimum of 500 cubic feet for each adult and 250 cubic feet for each child. The important consideration in planning a bedroom is to allow sufficient space for the bed or beds out of the draught from the window, so that there may be no special reason to keep the window closed. The remaining space should be convenient for dressing purposes, and for this reason it will be found that an oblong room is often better than a square one. The objection that exists, in the case of the ground floor rooms, to the door being placed in one of the corners adjacent to the fire, is of much less force ; in the case of a bedroom it will be found that this is often a convenient arrangement. Simple wardrobe cupboards may only consist of a wooden shelf in a recess, with a frame and curtains and pegs for hanging.

Structure of the House.—In the average situation in England and Wales, little if any, saving in cost appears to be effected by the use of timber for the construction of the dwelling house, although it may be possible to erect cheap wooden houses to a more or less standardised design.

In the Fen districts, or in situations where a reliable foundation cannot be obtained unless the walls are carried to an excessive depth, a simple concrete raft reinforced with steel rods will often be found to provide an economical and satisfactory foundation for the building. It is very common to see damp course placed too low ; it should never be less than 6 inches above the highest finished level of the ground, and some allowance should be made for the possibility of the tenant raising the level of the ground a few inches by laying out flower beds. Assuming that bricks will continue to be the material in more common use for the construction of the dwelling house, regard must be had to the fact that houses in the open country are usually more exposed to the weather than those built in a town street, and although a 9 in. brick wall may prove sufficiently weather-proof in the latter situation, it will seldom be satisfactory on a more exposed site.

The most effective and economical method of securing a dry interior is to build cavity walls ; failing this the outside of the house should be protected with a good thick coating of cement rough-cast. It is important that good mortar should be used ; the commonly adopted proportion of 3 to 1 for mortar does not give good results ; particularly when the lime is measured after slaking, as is often the case with the average materials, a proportion of 2 to 1 would prove more satisfactory.

The advantage of protecting walls by means of overhanging eaves is proved, as portions of walls immediately under exposed gable ends have failed to resist the weather, while other portions of the same wall under overhanging eaves have proved quite weather proof; this applies to 9 in. walls whether plain brick or rough-cast. The water that accumulates by running down the upper part of a wall is driven by the wind through any weak spots that there may be below. In the case also of window openings, weak spots are particularly likely to occur at the joints between the brick wall and the wooden frames. Properly constructed string courses and drip courses across the base of a gable, or over the heads of windows and doors, afford considerable protection by throwing off the water and reducing the volume running down the surface of the wall or window. All such drip courses, string courses or window sills, however, need to be properly weathered and throated if they are to effect their purpose. Where a stone window sill would be too costly, an oak under sill to the frame with a good projection will be found more effective than sills composed of brick on edge, a good drip under the sill may also be made by using two courses of paving quarries laid to brick joint as a sufficient slope and projecting an inch or two beyond the face of the wall.

Roofing.—The best roof covering to adopt must depend upon the district, and the treatment of the roof must vary according to the material selected. Where other roofing materials cannot be obtained without a heavy charge for carriage, slates will be found the most economical covering. The use of smaller and thicker kinds of slates will be more economical, give greater protection against cold and heat, and produce a better looking roof than the larger and thinner varieties. Over a large part of England one of the cheapest roof coverings is provided by the old-fashioned pantiles. Pantiles need to be laid carefully with sufficient pitch, preferably not less than 45°, and with a good lap. If not laid with mortar, pantiles are liable to be stripped by wind and will not keep out driving rain and fine snow effectually. The Norfolk system of lathing, which consists in laying three rows of plaster laths down each row of tiles to hold the mortar upon which the tiles are then bedded, is a very effective way of making a good and secure pantile roof. Another way is good flat tiles laid with a rise of not less than half the span and with at least 3 inches of lap and by the use of valley and hip tiles, roofs of a less simple character can be constructed more economically of flat tiles than of materials requiring the provision of lead gutters.

Windows.—The simplest and least expensive form of window is the Yorkshire slide, and if an oak sill is used with oak pegs instead of an outside retaining fillet it is very durable. It is quite possible to construct the Yorkshire slide with a transom, and to have the part of the window above the transom hung at the top so as to open out, and thus provide better ventilation. The casement window comes second in the matter of simplicity, and it is easy to arrange for a portion of the casement to be hung at the top so as to open outwards and permit of ventilation if for any reason the casement must be kept closed. The sash window is often preferred because it affords more varied facilities for ventilation ; it is more complicated, while the frame being composed of thin boxing is liable to rot, and the cords and fastenings are apt to get out of order.

Flooring.—The most economical floor is probably one of concrete ; such a floor should be finished, if possible, when the concrete for the house itself is laid, otherwise the flooring is liable to part from the concrete. The floor should be finished with fine granite chippings and dust, or clean, coarse sand mixed with an equal quantity of cement, and trowelled hard and smooth. The question of the living-room floor is one of some difficulty ; so far as the living-room serves the purpose of a work-room there is no doubt that a tiled floor is the most satisfactory and the easiest to keep clean, but so far as the room is used as a sitting-room there is the objection that the tile floor is cold. A boarded floor may be provided, but in that case it will most likely be covered with linoleum by the occupier, and apart from the expense involved linoleum has a decided tendency to encourage dry rot when laid upon a new board floor.

Standard of an Habitable House in Town & Country.

By A. B. Dunne, B.A., M.B., B.C., Cantab, Barrister-at-Law, etc., Medical Officer of Health, Doncaster R.D.C., and Bentley U.D.C.

I have recently been interested in a scheme for housing the working classes initiated by the Urban District Council of Bentley, which may be regarded as a typical modern mining community. A type of house is designed to let at 7*s.* per week clear. A description of this class of house, designed by the council's surveyor, Mr. R. G. Whiteley, for the accommodation of artizans and colliers, well illustrates the standard of an urban working man's dwelling.

The ground plan shows living-room, scullery, food-store, coal-place, and closet ; on the first floor there are three bedrooms. There are no out-buildings or projections from the main buildings, all are under one roof. The living-room is 15 ft. 0 ins. by 12 ft. 6 ins. clear, and scullery 11 ft. 6 ins. by 9 ft. 6 ins., with copper, sink, and bath provided. A w.c. is placed in a closet, access to which and the coal-place is from the recessed porch of the back entrance.

There is a recessed porch to the front door. A food-store 6 ft. 0 in. by 2 ft. 7½ ins., which ventilates directly into this porch, is provided alongside the living-room. A staircase 2 ft. 9 ins. wide leads directly out of the living-room, and is placed over the coal-store and closet.

The first floor contains three bedrooms as follows: No. 1, 12 ft. 6 ins. by 10 ft. 3 ins.; No. 2, 11 ft. 6 ins. by 9 ft. 6 ins.; No. 3, 9 ft. 6 ins. by 7 ft. 6 ins. All the bedrooms can be entered directly from the landing, and are provided with fireplaces, with the exception of No. 3.

The frontage of such a house is 18 ft. 9 ins., and the depth 23 ft. 10½ ins., and are intended to be erected in blocks of six or eight. It will be noticed that no " hall " or " parlour " is provided.

Such, then, is a standard house for, if one may so call him, a standard workman with a standard family.

Any dwelling intended for permanent occupation must be built of bricks and mortar, the common currency of the building trade, as one may term them. So far as I am aware, no cheaper form of material has successfully established its claim to supplant them.

Much of the present deplorable state of the housing which now exists is due to the fact that any place was thought good enough to build a house upon, and to a certain extent the same is true to-day. Therefore, one of the most useful provisions in any town-planning scheme is that which enables the local authorities to determine what parts of an area are to be allotted to dwelling-houses, factory sites, etc. Much low-lying and otherwise unsuitable land for building houses upon will thus be ruled out.

Now that the value of direct sunlight is becoming more appreciated, there is additional reason that the living-room should have a south-east or south-west aspect.

The minimum accommodation required resolves itself into the question of individual requirements and wages; but, apart from this, what should guide an authority in designing a house?

Having visited many workmen's homes, I am of opinion that a large sunny living-room, at least 14 ft. by 12 ft., is a *sine quâ non*, and my opinion has been confirmed by answers I have received from housewives whom I have questioned.

It has been argued that another room or parlour should be provided; that the husband or young couple must be thought of. My answer is that the claims of the housewife come before the husband, and that the young couple will look after themselves. What use is a parlour in most cases? I have more often than not found it unfurnished, or used to store the bicycle or pram in; sometimes let off to another family, or used as a bedroom for a lodger. The choice lies between a large, cheery living-room, with plenty of elbow room, and a cramped living-room and a pokey parlour.

Is a " hall " required? No. This cannot be without sacrifice of valuable space, which can be better utilized in the general living-room, than being wasted by being cut off as a dark, narrow passage, which leads to a front door seldom, if ever used.

Of what material should the floor of the living-room be?

Much may be said for a board floor, but this presumes sound, seasoned wood, and good, honest workmanship. A board floor is hard to keep clean, often harbours filth, and is much more difficult to scrub than a tiled one.

I am myself in favour of tiles or " quarries " set in cement. Few will deny that one's own kitchen thus floored is amongst the cleanest and most comfortable of rooms. Ask a woman of experience which is the easiest to keep clean, and she will say a tiled floor. This floor is dry, clean and durable.

A good closed range is both economical in cooking and cleanly, and has this advantage over an open or Yorkshire range, that more than one pan at a time can be used for cooking.

An essential to a living-room is the provision of one or more large cupboards.

A good scullery is the next essential. I have presumed that water is laid on over a glazed earthenware sink provided with a large hardwood drainage board. A copper should be provided fitted with a galvanized iron cover, so arranged as to permit the steam to escape up the flue. Lastly, a bath should be provided with hot and cold water laid on, and should have a hinged lid to cover it when not in use. Much amusement has from time to time been aroused by tales concerning the uses to which the bath has been put. I have made it a point to examine as many baths as I could, and have not up to now found any rabbits or boxes of bedding-out plants kept in them. I think too much has been made of the misdeeds of tenants.

Is a water-closet an essential? In a house such as I am describing, erected in a locality where there is a public water supply and a sewage-disposal system, a pedestal w.c. is an essential. Between the water-carriage system and any other, at all events as regards urban communities, " the verdict of the stricken field has been given," to use a picturesque phrase of the late Lord Salisbury.

The w.c. is placed in a closet which is isolated from the house by the rear recessed porch; this arrangement allows of a greater degree of privacy, and permits of a backyard unobstructed by out-buildings, an important matter when the washing is done at home and the clothes have to be hung out to dry in the backyard.

The food-store in the past has been an after-thought, but I have noticed in the new colliery village houses that very satisfactory ones are provided.

The ideal food-store is on the ground floor, with one wall an outside one at least. It need not necessarily be large as food is not bought and stored in large quantities nowadays, but it should be cool and well ventilated directly into the open air, and should not be placed under the stairs. A cold slab is a very useful adjunct. A space of 6 ft. 3 in. will usually be quite sufficient.

For the proper separation of sexes, which now is impossible in many houses, three bedrooms should be provided. As the usual size of beds are, double 6 ft. 6 ins. by

4 ft. 6 ins., and single 6 ft. 6 ins. by 3 ft. 0 in., two of the bedrooms should be of sufficient size to accommodate a double bed. The largest room will usually be occupied by husband and wife, and should in addition be able to take a small bed or cot for the little one. A room 12 ft. 6 ins. by 10 ft. 6 ins. by 8 ft. will do this comfortably.

The bedroom window should not be less than one-tenth the floor space; this, in my opinion, can with advantage be increased. Let me put in a plea for the sash window, as enabling the room to be more conveniently ventilated than by one of the casement type. The latter, with their cheap fittings, soon get broken and out of order, and then the window is seldom opened.

The third bedroom should easily accommodate a single bed, but as single beds are but rarely used by the working classes, it were better that this room should be designed for the use of a double bed. All bedrooms should have a fireplace, but in the type of house we are considering, it is usually impracticable to provide fireplaces in all three bedrooms. A ventilating opening must be placed in the outside wall.

Experience leads me strongly to urge the asphalting of the back yard. In theory, to reserve some part of it for flower beds is all very well, but in practice all uncovered earth soon becomes trodden down, and then soaked and soddened with tea-leaves, scraps of broken food, potato peelings, etc. Therefore, an asphalted back yard is an essential, as thereby alone can it be kept clean and sanitary.

Finally, sanitary dust bins should be provided. The ones which are supplied are too small in most cases to contain the week's household refuse. Unfortunately, these tins soon get knocked about and worn out and the lids lost, though fastening them by a chain to the house wall will obviate this. A back yard common to a block of houses should not be countenanced. It is a fruitful cause of untidiness, and what is everybody's business to keep tidy is nobody's. The rule should be every house its own backyard.

When we consider the standard of a habitable house for the poorly-paid worker in the town and the agricultural labourer, we are at once faced with the difficulty that the average weekly income of the former may never reach 25*s*., and in the latter rarely 18*s*. or 20*s*.

What rent can these afford to pay, keeping in mind the expense of rearing a family and the enhanced cost of living? I certainly think that 4*s*. and 3*s*. a week are the utmost that can be asked, any more is at the risk of bring up a semi-starved and impoverished population. Can houses be built to let within these rentals, and of what materials, on what land, of what size, and with what maximum room accommodation? It has been suggested that the £100 cottage will solve the difficulty in the agricultural districts. Will it? I have my doubts, which have been confirmed by the account that I have read by Dr. R. W. C. Pierce in his Annual Report for 1913, to the Guildford Rural District Council on the cottages built by Mr. St. Loe-Stracey.

The labourer is worthy of his home, which must be soundly built of durable materials, plain in character, and necessarily shorn of some of the conveniences and amenities found in the urban workman's home. To mention one in particular, a bath. There are conveniences now lacking in many rural cottages which might well take precedence of a bath. How about a copper? It does duty for both purposes in thousands of homes. I should certainly prefer a copper to a bath any day, and the cottage housewife has my sincerest sympathies when she has to boil the weekly wash in the pot over the open kitchen fire.

As water will rarely be laid on, a well-designed privy should take the place of a w.c. Even for houses under the rank of the country mansion, an experience of country rectories in several dioceses has led me to entertain the opinion that there is much to be said for the advantages of the earth closet over the w.c.

What principles should guide one in arriving at the conclusion that " a dwelling house appears to be in a state so dangerous or injurious to health as to be unfit for human habitation "?

Local authorities are apt to take a different view from their professional and statutory advisers as to the grounds on which the representations are based.

Briefly, I would enumerate such conditions, either existing alone in such a marked degree or in conjunction with others, as would support such a representation:

(1) Dampness in living rooms of old houses, due either to walls built without damp courses, or of very hygroscopic materials, such dampness rising up the walls to a considerable height, or extending over a large area, and persisting even in dry weather.

(2) No through or sufficient ventilation. Amongst such dwellings I would include those houses which are built " back to earth," where the adjacent earth reaches a high level, and back to back houses, so common in the northern towns.

(3) General dilapidations, under which I include cottages with walls perished, roofs leaky, rafters rotten, bedroom floors sprung and unsafe, and broken tiles laid on earth.

(4) The hopeless cases, for instance, dwellings which have been improvised out of old malt-kilns, barns, cart-sheds, and other miscellaneous buildings.

Cottage Building in Rural Districts.

By T. Wickford Potter.

In estimating the cost of cottages at the various competitions and exhibitions which have been held so frequently of late, it has been customary to give a figure which covers the net cost of the actual building only; but as everyone knows, excepting some of those who have to pay, there are several expenses which have to be met before cottages can be occupied which should be reckoned as part of their cost. I particularly refer to water supply, drainage, paving paths, and fencing. Of course these items vary very considerably, but in building in towns they can be estimated for comparatively easily. I do not propose to give any figures (excepting they are of general application), as in very few cases can they be comparable one with another, but it may safely be reckoned that 20 per cent. should be allowed for these necessities, and even then it largely depends upon the site and the stringency of the local by-laws.

Nearly all the model plans, many of which are excellent so far as they go, also make very little, if any, provision for outbuildings, and in the country these are almost as essential as living rooms. If the tenants do not find them they invariably proceed to erect something themselves, erections probably which are neither sightly nor advisable from a health point of view. They are a constant source of trouble both to a landlord who desires to preserve the amenities of the village, and to the rural district council who wish to administer their by-laws impartially, but to anyone who living in the country can enter into the cottagers' necessities, it does not seem to be an unreasonable requirement on the occupiers' part. The isolation in which they live means that they occupy themselves more at home, for the cultivation of their gardens they require a certain amount of store accommodation, and living miles from trams and trains means a bicycle, perambulator, etc., and of necessity the washing has to be done at home.

Some of you may consider I am talking of luxuries, but in the twentieth century they are very ordinary necessities and not unreasonable. Also we want to be looking forward and providing not only for the present, but for a few years in advance. Nothing is more annoying and misleading than the alterations and additions which are sometimes made a few years after the building is finished.

Speaking from considerable experience I have found that the best class of tenant will have a parlour. We hear a lot about making the tenants use the kitchens as living-rooms where there is only a kitchen and scullery, and I know of several pairs of cottages built with this object. They have large kitchens and very small sculleries, but out of about eight families one only makes use of the front room as a living-room. Some have large families and how they manage to live all together in the small back room is a wonder, but they do. If remonstrated with, the wife, who after all is usually the dictator in the house, will give you at least half-a-dozen reasons why she cannot do otherwise. And this feeling is not confined to one class or one part of the country, but exists generally. Is it not best therefore to face the matter squarely and agree that as these people have to live their own lives, we must recognize that they will have a room of this description ? In the recent competition held by *Country*

Life their architectural editor, in writing of the third bedroom being put on the ground floor, tells a similar tale of a landowner who made a census of twenty-five cottages with a bedroom on the ground floor, and in only four cases did he find that this room was used as a bedroom, and in two of these there were reasons which could not be considered as really affecting the question, so that left 8 per cent. who did without a parlour. It is no good trying to make the scullery inconvenient for the purpose of living in, as in the first illustration given this was specially considered and as supposed, made impossible.

Therefore, I think, if we recognize this, and plan our buildings so that a small front parlour is provided, we shall make the inhabitants healthier by being able to give them a larger living room. As we cannot then, as a rule, provide a scullery, we are met with a difficulty regarding the sink and washing boiler, neither of which for hygienic reasons should be in the living room, although with various steam exhausts in the market the evil from the latter is largely minimised.

Even with these valuable aids, however, tenants, as a rule, do not like the washing boilers inside the house, and I think it is easily understandable. In the first place the exhaust cannot always take off all steam. When it is opened, or clothes are removed, a certain quantity is bound to escape, and, moreover, a living room cannot be kept decent with a lot of dirty or wet clothes about. The only advantages to the tenant, when in the kitchen, is, that if there is a young family, the wife can keep an eye on the latter and she has not to go out in bad weather ; but both these benefits may be obtained in a well-designed separate washhouse and scullery, and I have found a very strong opinion in favour of this arrangement, and of the outbuildings generally not being under the main roof of the cottages.

In a majority of the designs of cottages obtained by *Country Life*, the earth-closet and coal places are shown inside the house, but apart from the tenant's objections there are weighty reasons against this being done.

The Local Government Board, as shown by their latest Model By-laws, treat earth-closets as privies, and this arrangement would therefore be contrary to the By-laws if recently adopted. Those of us who have had experience of use of earth-closets in rural districts can fully understand and agree with the Local Government Board's requirement. If they are constructed as privies, but available for use as earth-closets, well and good ; but it is a fact that earth-closets pure and simple never or hardly ever, get the attention required to render them of any value in rural districts. Therefore it must be a great mistake not to treat them as privies at once, and keep them the required distance from the houses, usually 10 to 12 feet ; and I do not think there is any hardship in this, but on the contrary it tends to the health of the inhabitants.

The bedroom on the ground floor does not, as a rule, find favour for various reasons. In the case of a young family it means the members being some distance apart and not under sufficient control. I have also known children up to quite a good age nervous and unable to rest properly, and the difficulty has only been partly met by fixing iron bar guards to the windows. For somewhat similar reasons the bungalow type of building is not, as a rule, popular in purely rural districts, especially in low-lying country, and medical science appears to be in favour of the resting place when for several hours vitality is at its lowest ebb, being some distance above ground air, which, although it may be prevented from rising inside the house, will generally permeate through, and would prevent windows being kept open all night.

Baths are sometimes considered a necessity in cottages nowadays, but, although they are undoubtedly very useful, it is questionable whether there is much real demand for them on the part of the agricultural labourers. At all events, those items which have been previously enumerated are generally considered by them much more important, and excepting in special cases, as miners, chauffeurs, etc., they are not in much request. We may safely say that not one quarter of the smaller farmhouses at present possess them, and these may fairly be considered first ; and when baths have become popular with them it may be time to put them into cottages. Until then the tenants are, as a rule, satisfied with the portable bath or tub, which not so many years ago was the universal and popular method of having a bath in many of the largest houses.

The by-laws in rural districts have undoubtedly pressed heavily upon those willing to erect decent habitations, but objecting to unnecessary regulations. Fortunately, the Local Government Board appear to have recognised this to some extent by their more recent models, and the President has even stated that they were glad to make them more elastic. I find, however, from every recent experience, that this means elastic according to the model, but the department still appear to object to much change of their by-laws, be the model used rural or urban. At the same time it is very doubtful if they have added 10 per cent. to the cost of building, although in one case in my own experience quite a good type of house cost just this amount to alter and make strictly according to the by-laws. In this instance, an isolated farm-house, the height of 9 feet was insisted upon for the ground floor rooms and for two-thirds of the upper ones 8 feet 6 inches. Also with respect to the full area of light to bedrooms, both of which provisions are very essential in urban districts but hardly so in the open country. But as the dearth of cottages is felt just as acutely in these rural districts where no by-laws exist, we must not put the whole of the blame upon the latter, and it is only reasonable to suppose that the fault is much more deeply seated. Although, therefore, some of the by-laws may be regarded as a contributary cause of the scarcity of new cottages now existing, they are far from being the essential one, which is undoubtedly the high cost of materials and skilled labour, whilst the wages of agricultural workmen have not risen in the same proportion. Notwithstanding that these men have in many cases to pay one-fifth of their income for rent, it is very noticeable in some districts where coal mines exist that the highly paid miners are content to put up with very small houses and poor accommodation, although probably only paying rent to the extent of one-eighth of their income; and it is in these districts, which are counted as, and are practically, rural, that there has been much cottage building in any quantity going on during the past six or eight years.

(*To be continued.*)

Continental Town Planning.

During the past six years annual visits have been arranged by the National Housing and Town Planning Council to study the best examples of Continental Town Planning. In the course of this period many cities have been visited, including Paris, Berlin, Vienna, Stockholm, Copenhagen, Brussels, Amsterdam, The Hague, Rotterdam, Hamburg, Munich, Dresden, Frankfort, Cologne, Dusseldorf, Essen, Zurich, Berne, Geneva, Rheims, Ulm, Carlsruhe, Weisbaden, Stuttgart, Nancy, Nuremburg, etc.

The cities to be visited this year will include Prague, Buda Pesth, Vienna, and Leipsic, and every facility will be given for the thorough study of the Town Planning work accomplished by the respective Municipal Councils. Prague and Buda Pesth—cities which are unknown to many English travellers, are of extremely great interest as centres of a progressive municipal life.

Membership of the party will be limited to municipal representatives (Councillors and officers), architects and surveyors, and members of the National Housing and Town Planning Council. (Ladies will be welcome as members of the party.)

The party will leave London on the evening of Saturday, August 29th, reaching Berlin the following afternoon. Prague and Buda Pesth will be visited in the first week, and Vienna and Leipsic in the second week.

The return journey will be made by the Hook of Holland route on Saturday, September 12th, reaching London on Sunday morning September 13th. The cost of the complete journey will be £23 10*s.* 0*d.*

Communications in regard to the Visit should be addressed to Henry R. Aldridge, Secretary, National Housing and Town Planning Council, 41, Russell Square, London, W.C.

A Ministry of Fine Arts.

Conflicting Opinions.

The Builder, which was responsible for organizing the movement in favour of the establishment of a Ministry of the Fine Arts, in referring to the inauguration at Guernsey, of a statue to Victor Hugo, says, the importance of the occasion may be judged by the fact that both the Governments of England and France were represented. The mission from France was headed by the Minister of Public Instruction, supported by two other ministers and by the Under-Secretary for Fine Arts. That from England was headed by the First Commissioner of Works, supported by several officials, none of whom, however, seem to have any special claim to represent art. The Government may be fortunate in having as spokesman one so well fitted to give felicitous expression to its sentiments; but, however great the personal qualifications of the present First Commissioner, it is impossible to regard the chief of the Office of Works as being qualified by his office to speak in the name of the art of the country. We cannot help thinking that it would be more in accordance with the fitness of things—that it would tend to affirm the value and the dignity of art—if on such ceremonial occasions the country could be represented by a Minister of Art.

On the other hand, Mr. Anning Bell, in the course of an article in the *British Architect*, says it is too readily assumed that the majority of artists are in favour of it.

He has met several lately in Paris, all of them aghast at the idea that we should voluntarily take on our shoulders a burden they would gladly escape. They admit that a good deal of public money is spent that way, but doubt very much if it is spent usefully; at any rate, the amount of friction and intrigue is lamentable and there is the inevitable tendency of officialism to run in ruts. The encouragement given to sculpture, painting, and architecture runs mainly to the maintenance of prize-winning students, and makes it difficult for those who "arrive" later in life, as do many of the best artists, to gain the support which their merits deserve. It is the centralizing of the system apparently which is to blame: that very centralizing which it is desired to set up here.

He does not believe that an advisory body, paid or unpaid, would have any real power. A Minister of the Arts would necessarily be a politician with an eye to promotion to a superior portfolio. A question in the House would loom hugely more important in his eyes than the opinion of an advisory committee in the background. An advisory committee, without power to act, can only be useful when working with *permanent* officials, as is done at present. Let us avoid like the devil anything to do directly with politicians. We should find ourselves in deep and very troubled waters and affected by currents of which we did not even know the existence.

In the meantime the *Times* states that it is proposed to form a Parliamentary Committee consisting of members of both Houses interested in art matters. The objects which such a committee would have in view would be the increasing of the national collections, the proposed Ministry of Art and special questions, mainly of administration in connection with the Government Departments relating to art. The Office of Works, the London County Council, and other authorities frequently have to decide questions of great public and artistic importance in the decoration of parks and the erection of public buildings or monuments. Such a committee as that proposed could direct public attention to what was being done.

A number of members of both Houses and all parties interested in matters relating to art have already accepted the invitation to join the proposed committee. They include:—

Lord Crawford, Lord Bryce, Lord Curzon of Kedleston, Mr. A. A. Allen, Sir George Agnew, Lord Henry Bentinck, Sir Edward F. Coates, Mr. Stephen Gwynn, Sir Alfred Mond, Mr. Almeric Paget, Sir Gilbert Parker, Sir Herbert Raphael, Mr. Philip Snowden, Mr. Edward Wood, and Mr. Montague Barlow, hon. secretary *pro tem.*

Our contemporary in a leading article suggests that one of the questions which are ripe for discussion and would be better discussed by and before such a Committee than by a full House of Commons or even by a Royal Commission, is the question whether it is desirable to establish a Ministry of Fine Art. There is one in France; would it be well if we had one here? In France a tradition, dating back to Louis XIV., has made the central Government as directly responsible for the arts as it is for any other public department; and the question is whether we, who have no such tradition, and among whom there is much less general education in artistic matters than among the French, should be better or worse off if we concentrated our museums and our schemes of public decoration in the hands of a Minister. This cannot be answered off-hand, but it is worth the close attention of such a body as the proposed Committee. Several of the members named in the list are well known for their interest in art, while others have their spurs to win, and some members of either House, as yet absent, should certainly be added. It is suggested that in such a composite Committee party questions will have no place.

The Architect and Structural Engineering.*

By William E. A. Brown, A.R.I.B.A.

It is the architect alone, who should determine the positions of all main girders, stanchions, and supports. In many buildings it is impossible to proceed with the design until these positions are determined. In some cases it is the roof which is the determining factor in planning a building—whether the spans shall run from north to south or east to west.

Some buildings could be designed in three or four different ways, all depending on the arrangement of the girders and roof trusses. It has been implied that architects are generally not qualified to deal with these matters, but delegate the work to some one else. How is it possible for an architect to prepare a design and submit plans to his client for approval without knowing and showing where stanchions and piers, etc., are to come? To do so would be courting trouble.

For contracts involving a large amount of steelwork of a complicated nature a consulting engineer should be appointed by the architect, but there are many smaller works where this is not necessary, nor would the outlay on the building work warrant the expense incurred. It is quite satisfactory, given certain conditions laid down, for the architect to send the drawings to several firms of engineers, and let them make their own calculations and quantities; but to enable the various contractors to estimate on the same basis, the following information must be given to each:—

1. Plans of all floors showing the lines of all main girders and the position of stanchions and columns; also a section or sections and outline elevations must be given. It is not always possible at the stage when estimates are invited to supply ½ in. scale sections through the external walls, etc., as was suggested by Mr. Cocking.
2. The loads that each floor has to carry and whether live or total loads.
3. Whether British or foreign steel is to be used, and whether the L.C.C. regulations under the General Powers Act, 1909, are to be complied with. If not, the stresses should be specified that are to be worked to.
4. Whether price is to include for hoisting and fixing, or only for steelwork delivered to site.
5. If it is to be delivered unpainted, painted or oiled, and if painted with what materials, and that all scale and rust must first be removed.
6. Workmanship, whether connections are to be riveted or bolted, and if the latter whether ordinary bolts will be allowed.
7. Whether the price is to include 10 per cent. profit for the builders or only 2½ per cent. cash discount. My own practice is to state the latter.

Floor Loads and Loading.

There is a diversity of opinion as to whether the dead loads and superloads on a floor should be kept separate in making the calculations, or whether a load, to include the dead weight of the floor itself, should be taken.

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* Summary of a paper read before the Concrete Institute.

One must take into consideration the point loads which often occur from partitions, etc. This is often neglected by competing firms of engineers, but some of the concrete partition blocks on the market weigh a considerable amount, and one is often surprised when the weight is calculated out.

Another matter is the central loading on girders carrying walls with openings and narrow piers between. Some engineers assume that the loads are evenly distributed over the span through the brickwork below the window sills. If the sills are very high up, this may be so; but in many cases the sills are only 12 in. or 18 in. above the girder, and the loading in such a case should be considered as a point load, or as a distributed load over a length of the girder equal to the width of the pier.

In calculating the loads on stanchions, etc., the author said he did not take advantage of the reductions allowed by the 1909 Act.

Connections, Workmanship, and Supervision.

The connections and workmanship are very important matters to be considered, and they do not always receive the attention that should be given to them. Of what use is it to have a strong joist or stanchion, if the cleats under the joist, or the joints in the stanchion, are not properly designed, or, if the design is correct, the connections themselves are badly made? How often does one find, when checking the carrying out of work that the connections between girders and stanchions, calculated to provide a fixed end for the stanchion, are such as to be practically useless to attain that object.

The number of rivets in cleats carrying the ends of joists should also be carefully checked. The 1909 Act says that rivets shall be used in all cases where reasonably practicable, but there are a very large number of buildings to which this Act does not apply. All steelwork should be designed in accordance with the provisions of the 1909 Act. The conditions for bolted work should be amplified in the Act, the only requirements now being that the bolt shall extend through the nut and the latter be secured so as to avoid the risk of becoming loose.

Dead bearings should always be provided or else riveted connections. If neither of these is practicable, as in connecting large roof trusses together on the site, then driving-fit bolts with plain shanks right through all the plates, the holes being concentric, should be put in. The ordinary $\frac{3}{4}$ in. bolt is quite good enough for bolting when it is not called upon to take shear.

It is now the custom at the works to dispense with hand riveting, and to do the work cold by pneumatic pressure. This is, no doubt, more expeditious and economical, but is not so good as the older method.

Another important point, and one that is not always attended to, is that all holes through two or more thicknesses of metal should exactly coincide. If they do not coincide, how can the rivets or bolts take a proper bearing and transmit the loads from one to the other?

Filler joists in concrete floors should be bolted or cleated, at least every third joist, to the main beams. It is becoming a common practice to place the small filler joists on a concrete haunching resting on the bottom flange of the main girder and not tied in in any way to the girder. This method of construction should be condemned, as there is little or no adhesion between the haunch and the girder, and not very much between the floor slab and the haunch, as the latter is made first and sets hard before the floor slab is cast. Continuous angle stringers riveted to the web of the main beam for the fillers to rest on are preferable. This facilitates erection and the fillers can be bolted to the stringer.

Square bevelled washers should always be put on the flanges of joists when using bolts, and care taken that they are the right way round.

The connection at the joint in the length of a stanchion should be carefully made. The sections should be milled to bear evenly on each other, and the fishplates and angles should be riveted. To make sure of getting a proper seating between the two stanchions, the holes in the upper member should be drilled when the latter is in position.

The walls sometimes actually take some of the weight off the stanchions where the latter are built in, but steelwork should be erected to carry the loads put upon it, and one should not depend on outside support for making good any deficiency in design or workmanship.

There are, of course, cases in which one can legitimately reckon on the brickwork helping the steelwork.

Large gusset plates should not be allowed, unless properly stiffened to prevent buckling. It is good practice to encase the whole of the stanchion base right up to the floor-line with concrete. This prevents rusting, and it also holds the foot of the stanchion firmly in position. The putting of stone templates under stanchions is not to be advocated. There is a difficulty in bedding both the template and stanchion, and if the latter has to be grouted in the stone might as well be absent.

There is some difference of opinion whether the top cleat connecting a beam to a stanchion should be riveted to the stanchion at the works or be sent loose and fixed on the job. The former is not very practicable, as it would be very difficult to get the girder in position, and if sufficient clearance is allowed for this to be done then the value of the connection is materially reduced.

Girders supporting walls as well as main floor girders, if they are formed of two or more plain I-beams side by side, should have plates riveted on top and bottom.

With regard to the protection of steelwork in buildings, where the steel is cased in concrete there is no necessity for paint—in fact, it is better not to paint it. All scale and rust should, however, be removed, and a good coat of cement wash is an advantage.

Steelwork in walls should be either cement-washed or painted. Exposed steel should, of course, be painted. The first coat of paint on all work, whether wood or steel, is of the utmost importance, but seldom receives proper attention.

Reinforced concrete is an excellent method of construction, but very careful and constant supervision is necessary, or something may go wrong.

The author said that in calculating the sizes for steel joists embedded in concrete his practice is to let the steel carry the load as an independent beam, but taking the depth of the beam anything up to $\frac{1}{20}$ of the span, limiting the stress to 7½ tons per square inch. This is quite enough, as often these small joists, such as 3 in. by 1½ in. and 4¾ in. by 1¾ in., are of foreign make.

He also had a preference for joists with 3 in. flanges over those with 1½ in. and 1¾ in. flanges, for the reason that the concrete, which forms a slab between the steel joists, has a much better bearing on the joist. When the concrete is formed of broken brick or ballast, the aggregate is not often broken up as small as one would wish, and therefore the concrete is not filled in solid around the steel joist. The narrower joists also are often badly distorted in handling, and get put into position all bent without a proper seating at the ends.

The author uttered a warning against using breeze for floors. There is a very great danger of expansion, and he knew of several cases where this had occurred and pushed walls several inches out of upright, and even when the wall was rebuilt it happened again. There is also a corrosive action between the concrete and steel which in time may endanger the stability of the floor.

With regard to shear in reinforced concrete slabs and beams, it is not wise to calculate for the concrete taking any part of the shear, although the R.I.B.A. regulations and those proposed by the L.C.C. give 60 lb. per square inch as the allowable shear stress.

Expanded metal is an excellent form of reinforcement for slabs, and binds the whole of the concrete together.

In large beams and pillars there is often a difficulty in getting the reinforcement into the correct positions, and also in having the rods properly surrounded with concrete. Another important item to see to is that all of the rods, where they pass in connecting beams and pillars together, are surrounded with concrete. It is a difficult matter sometimes to do this, and considerable skill is required in arranging the rods in positions such as have been mentioned. As far as possible, the reinforcement for all beams and pillars should be assembled on the ground and the rods securely wired together to keep them in their correct positions before being placed in the forms.

It is also very important that all forms should be properly cleaned out before any concrete is put in, and the best way of doing this is by water and a hose-pipe.

The British Fire Prevention Committee.

Recognition of its Work.

The important work carried on by this Committee must appeal to all thoughtful architects and is of additional interest to members of the Society, from the fact that the Chairman of the Executive, Mr. Edwin O. Sachs, and the General Hon. Secretary, Mr. Ellis Marsland are fellow members.

A remarkable compliment to the fire preventative work of the Metropolis has recently been paid by the holding of a series of meetings in London last June by the International Fire Service Council's Executive, a body comprising delegates of the European Committee and Associations connected with fire protection having an aggregate membership exceeding three millions.

The arrangements were made by the British Fire Prevention Committee and the meetings were honoured by His Majesty wishing the Council success. The delegates were received on behalf of His Majesty's Government, who entertained them at luncheon, when the Earl Beauchamp presiding took the opportunity to express his appreciation of their work and its beneficial influence. The London County Council also entertained the visitors and afforded them numerous facilities.

Earl Beauchamp, His Majesty's First Commissioner of Works, in welcoming the delegates, said, His Majesty's Office of Works benefited by making continual use of the results of the deliberations of the British Fire Prevention Committee as well as of the Council ; and by the way, to mention one single instance, it would be that of the doors of the National Gallery.

The criticism which was generally made of the work of the British Committee was that it was somewhat drastic. On the other hand, the severe conditions imposed by the Committee had caused the high reputation, and the efficiency of the Committee, and its influence and usefulness were so extended that its scope included all European countries that had Associations for the prevention of fire and that are represented on the International Council.

The work of the International Council and of the British Committee was of a voluntary kind. It had no power to enforce its views, but it was a great thing in these days when public attention was directed to so many different objects that there should be a Council and a British Committee such as this in which experts were able to focus public opinion, and to provide a standard below which it was wrong for any Public Department to fall.

The British Fire Prevention Committee had taken an active part in the work of the International Council, and had also founded an important fire testing station, which had been taken as a model in other European countries and also in the United States. Their tests were generally recognized, their influence had gone far towards affecting all questions of building and construction in England to-day, and it was a matter of special interest to note that for the first time, in the course of last year, the actual loss of property in London, or the value of the property which was lost in London by fire, was less than the cost of maintaining the London Fire Brigade.

Commandant Meir of the Amsterdam Fire Brigade, speaking as President of the International Fire Service Council, said it was in the last few years that Fire Service had grown to be a science. It would be desirable that in every country, at the polytechnics and high schools there should be a teacher of the science of fire, for he could say from an experience of twenty years as a Fire Chief, that although there had been many artistic architects, some of them often had very wrong ideas about fire prevention. The aim of the Fire Service Council was the development not only of the science of extinguishing fire, but more especially the science of the prevention of fire.

In the great cities of the Continent, as also in London, the Chief of the Fire Brigade was not only a fire extinguisher, but his great duty was the prevention of fire. But he was not at all sure that this was the case in many other cities in England. But then England was so fortunate as to have the British Fire Prevention Committee, whose name was known not only there, but far over all frontiers on the Continent. They all knew the " Red Books " of the British Fire Prevention Committee to be of the greatest value to the fire service all the world round. When he named Mr. Edwin O. Sachs, the founder of that Committee whose energy and science and knowledge had directed its works during the past fifteen years, he spoke in the name of the whole International Fire Service Council when he addressed to him his most sincere compliments.

The Meeting besides doing useful technical work, was a remarkable achievement towards the general advancement of the all-important subject of fire protection at home, where the advent of a new era of scientific fire protective work may be said to have now arrived, and to enjoy official recognition.

A Second Atelier.

The First Atelier now has its full complement of Students, and the Beaux Arts Committee feeling that the success of the First Atelier will be greatly enhanced and the objects of the Committee still further promoted by the affording of opportunities for emulation and competition on similar lines, have decided to establish a second Atelier in London.

The Committee hope shortly to make some more definite announcement, and in the meantime enquiries should be addressed to Mr. Adrian Berrington, at the First Atelier, 16, Wells Mews, Oxford Street, W., or of the Honorary Secretary of the Beaux Arts Committee, at 28, Bedford Square, W.C.

Theatre Construction from the Fireman's Point of View.

Chief Officer, J. W. Dane, of the Croydon Fire Brigade, in a paper read before a meeting of Fire Brigade Officers at Barrow-in-Furness, says the modern built place of amusement, owing to the various building by-laws, is a well-constructed structure, and generally it is not till after the building is put to its intended use the fireman has much opportunity to assert his views, beyond fixing the position of hydrants and fire equipment.

The modern structure has a brick-built proscenium wall with a "fire-resisting curtain," and a standard of construction is needed for this fitting. All should be fitted with an air brake or similar device to ensure the steady descent of the curtain directly the controlling lever is released and a sprinkler, yoked to the release lever, to provide a stream of water down the curtain at the same time to help it to stand up to its work when a fire is in progress.

Further, curtains should be lowered once during each performance, and unless the curtain is in satisfactory working order the house should be closed. Upon the efficiency of the fireproof curtain depends very largely the safety of the audience in case of an outbreak of fire on the stage.

At least two fire hydrants should be provided on the stage, one in close proximity to the O.P. side and as near to the curtain-releasing apparatus as possible. It should be of full working size and fitted with a nozzle suitable for the pressure on the main and not larger than three-quarter inch. The hose provided of a moderate length to enable it to be got to work quickly. Further, on the main feeding this particular hydrant a pressure gauge should be mounted, to enable the water pressure to be checked at a glance.

Near should be an opening in the proscenium wall fitted with a fire-resisting door to afford a means of escape to the person operating this hydrant should the outbreak of fire get beyond control.

The second hydrant, with similar fittings, should be at the opposite side of the stage near an exit.

Two full-size hydrants and hose with branch fitted with a smaller nozzle should be placed in the flies, one on each side, in close proximity to emergency fire escapes, to enable men working same to have a satisfactory means of retreat should they be unable to check the fire in progress.

Further, in view of the large companies that are utilized to-day in scenic shows, the dressing room accommodation is usually quite insufficient to meet the needs of the people employed, and in instances the space under the stage and in the O.P. side of the flies has been turned into dressing rooms. Those who are constantly about theatres know that this constitutes a grave menace to public safety; candles are lighted to get heat for grease paints, smoking is indulged in by both male and female performers, and it requires constant attention on the part of the fireman to keep the danger and risk down.

All effects liable to take fire on a stage should be treated to make them fire-resisting. It should be insisted upon, and the owner of the properties should furnish a certificate as to the date the plant was last treated and to show on demand, at his own expense, that the treatment is still effective to the satisfaction of the licensee or the visiting officials.

Dressing rooms in theatres are—in up-to-date structures—generally separated from the main structure, but adjoining and communicating.

All doors between stage and dressing room corridors and staircases should be self-closing and fire-resisting. Further, a secondary means of escape should be provided in case the main staircase becomes impassible on account of smoke or heat.

The lighting of the modern place of entertainment is electrical, and the demands at times show that a considerable factor of safety is an absolute necessity to prevent overload. Every plug circuit and light circuits of various descriptions should be efficiently protected by fuses. Resistances—a weak point—should be at least 2 ft. below any woodwork and not screwed into wood plugs in brick walls, but mounted on proper iron brackets dowelled into the wall.

A set of model regulations for dealing with the fire risks in all places licensed for stage plays and music and dancing may be summarized as follows :—

1. Regulating the number of the audience at any one performance, according to seating or declared standing room, in accordance with size of exits, corridors, and staircases, to be standardized for the number of persons to pass through, say 4 ft. 6 in. door for 150 persons, three 4 ft. 6 in. doors, or two 6 ft. doors for 450 people on ground level ; on higher levels the width of doors, passages, and staircases should be of greater width.

2. Standard of construction and fitting of fireproof curtain.

3. Curtain to be lowered once during each performance. In case of failure, house to be closed.

4. Fire apparatus to be to the satisfaction of the Fire Superintendent of the licensing authority. At least four hydrants to be within the stage risk properly equipped, and a water pressure gauge mounted in prominent place.

5. Firemen of the public service to be on duty on the stage with full view of same during the performance at the expense of the licensee.

6. Efficient secondary means of exit to be provided from flies and dressing rooms.

7. No part of the stage risk to be utilized as dressing rooms.

8. Independent engineer to certify as to the condition of electrical equipment once in every year to licensing magistrate, or authority, or at any other time on demand at the expense of the licensee.

9. Storage of old properties within the stage risk to be prohibited.

10. Smoking within the stage risk during the time the public are in the house to be prohibited.

11. Inspection by authorized officers at any time, and any part of the premises.

12. Illuminated exit notices should be fixed over all exits on an independent system of lighting to the ordinary lighting of the building.

13. All exit ways, corridors, passages, and staircases used as means of egress to be efficiently lighted by two independent systems of lighting during the whole time the public are on the premises.

14. All properties that will ignite to be made fire-resisting and maintained in such condition. Owner to certify the date of last treatment on demand by the licensee or public safety officer to prove the treatment is still effective, at his own expense, to the satisfaction of the requesting parties.

15. All doors to open outwards and, if fastened, secured by automatically pressure-releasing bolts. Method of operating: "Push bar to open" painted on the doors.

In reference to the cinematograph exhibitions, the Secretary of State has issued his regulations which, supplemented by the local authority's regulations, ensure safety to a certain degree; the seating accommodation should be dealt with in the same way as previously recommended.

An independent source of lighting for secondary means should be installed and in use whilst the audience are present. If electric light is the usual light, then gas should be installed for emergency use.

There are two special points raised by Mr. Dane, one is that entrances and exits to operating rooms should be always outside the auditorium, and if this cannot be secured no license should be granted to the premises.

Cinematograph film fires cause a lot of smoke, and should the operators open the door to get out of the box there is a rush of smoke and the audience know at once what is the matter. There have been two film fires in operating rooms in Croydon and the audience have been unaware of the fact. The boxes in both cases had independent entrances clear of the auditorium.

The other is that great danger exists in the rewinding room, for which compartment the Secretary of State has made no regulation or provision. In Croydon iron boxes for films in winding rooms are insisted upon and all clippings boxed up and rooms kept free from rubbish.

The Things which Belong to Art.

Canon Hannay (George A. Birmingham), the well known author and playwright, in the course of a newspaper article on " Windows," says, if there is anything at all settled about beauty it is that the sash windows of Victorian architecture, with their large sheets of plate glass, are irredeemably and hopelessly ugly; while the casement windows of Edwardian and Georgian (George Quintian) times are, in themselves, very beautiful things. I never yet met with an artist or an architect who had a good word to say for a plate glass window which opened up and down, or who denied that casement windows with small diamond or square panes are exquisitely lovely, most lovely of all when the glass is rather opaque and has bright green lumps in it here and there. We may take this as established. The concensus of educated opinion on the subject is absolutely overwhelming.

As soon as the middle class Englishman found out that casement windows are beautiful things he began to have them put into every house that he built. This is a great credit to him. It shows that he is not impervious to ideas and that he does want to be as artistic as he can. But to appreciate the Englishman's devotion to beauty it is necessary to realize the sacrifices which he makes for it, and this can only be done by someone who has lived in a house with casement windows.

The old sash window, consisting as it did of two large sheets of very transparent glass with a thin bar of wood between them, let in as much light as possibly could be let in through an aperture of given area. The casement window, with its tiny leaded panes and its heavy upright beams, lets in very little light. The sash window, unless we deliberately broke it with a stone, kept out the rain. Casement windows must have towels, bed-quilts and old blankets laid along the bottoms of them in order to sop up the water which pours through them every wet day; and this is most inconvenient. When it is cold the bitter air rushes through casement windows even when tightly shut, and blows away our papers as well as giving us pneumonia. In summer when everybody is panting and wants all the air he can get the casement window offers a chance of opening small square bits of it here and there, just enough to make an irritable man want to wreck the whole structure with a sledge hammer. The old sash window invited you to push it up until you had a wide space of open air in front of you. You cannot look out of a casement window with any pleasure. In the first place anything you see is scored across with bars which are destructive of the beauty of a landscape and in the next place casement windows are generally placed so high in the wall that you cannot look out of them at all without standing up. This, I am told, is necessary in order to preserve the particular charm of the casement window. But it is most uncomfortable. Having contrasted the conveniences of the old sash window with the defect of the modern casement, he goes on to say, that casement windows are, of course, a feature of old English houses; but I have always doubted whether the old Englishman used them with the deliberate intention of making his life beautiful. I do not believe he was as artistic as all that. Only the modern middle class Englishman is. His great grandfather, who lived perhaps on a farm down in Sussex, had casement windows with small panes because he did not know how to make plate glass, and had not yet hit on the idea of sashes with cords and weights. The next generation invented sashes and improved its windows by making them with larger panes. Then came plate glass and with it the possibility of a really comfortable window. The men of that period, our fathers, went in for large, sound, weather-tight, plate glass windows which let in the light and kept out rain. But they did not care about art. Their sons and daughters, the middle class English of to-day, are much nobler. They have given all things for beauty. Their windows prove it. I, for one, will never again believe that the English are materalized or that they value beef, beer, and comfort above the things which belong to art.

Holiday Competition.

METAL WORK CRAFTSMANSHIP.

Messrs. Whiteside & Caslake, of 4, New Burlington Street, Regent Street, W., offer money prizes for drawings or photographs of specimens of Metal Work Craftsmanship.

In making a drawing or photograph of any work, a lock or hinge for example, it must be large enough to show the detail and a smaller drawing or photograph, if necessary, should show its application and surroundings.

The drawings or photographs need not be the actual work of the competitor. For instance, he might during his rambles secure in a secondhand shop or elsewhere, an illustration or photograph of a choice screen, a lantern, etc., and this would be accepted in the competition.

All drawings or photographs gaining a prize are to become the firm's property. Those *not* gaining a prize will be returned if stamps are enclosed.

The full name and address distinctly written must be on the back of each exhibit together with the sale price. The firm reserve the right to purchase at the price so marked, and to make use of any drawing or photograph.

In awarding the prizes £5 5*s* 0*d*. will be given for the best drawing in black or brown lines; £3 3*s*. 0*d*. for the best photograph; and £2 2*s*. 0*d*. for the best drawing or photograph purchased or obtained from a third person. A selection of those considered the best will be submitted with a recommendation to an independent authority whose decision shall be final.

All drawings or photographs must be sent in on or before October 31st, 1914.

Mainly about Members.

We regret to announce the death of SIR BENJAMIN STONE, Honorary Member. The deceased member who died on July 2nd, at his residence in Birmingham, was for upwards of fourteen years M.P. for East Birmingham.

He was 77 years of age, and was a man of many interests. He took an active part in Local Government matters, and was five times Mayor of Sutton Coldfield.

His chief hobby was photography, in which he was a recognized expert. He was granted special facilities for the exercise of his art on public and other occasions, and was the Official Photographer at King George's Coronation.

In pursuit of his hobby he travelled far and wide, and compiled a wonderful collection of photographs which he presented to the British Museum.

Some years ago, Sir Benjamin Stone lectured before the Society on " Eastern Buildings," and showed a unique series of lantern slides, from photographs taken, some of them at the risk of his life.

Sir Benjamin was a man of genial personality and was always ready to give others the benefit of his counsel and assistance. The Society owes him gratitude for advancing its interests in several directions at considerable personal trouble.

New premises in Salter's Lane, Darlington, for Harrowgate Hill Club and Institute have been erected at a cost of about £3,500, to the design of MR. G. WALESBY DAVIS. The large hall will accommodate 500.

MR. HERBERT FREYBERG, F.S.I., DIP. SAN. SCI., a London Member, attended and gave evidence before the Departmental Committee recently sitting at the Local Government Board, to consider the revision fo the Model Building Bye-Laws.

The Herbert Strutt Schools at Belper are about to be enlarged and rendered more suitable for conversion from higher elementary to secondary. The work will cost £6,000, and will be executed at the cost of Mr. G. A. Strutt. The architects are Messrs. HUNTER and Woodhouse.

We are glad to hear that MR. THOMSON FOLEY, of Beverley, is recovering from the accident which happened to him some weeks ago, when he fell and broke his arm. Being a man of considerable weight, he was somewhat severely hurt, and is only now just getting back the use of his arm.

Gateshead School Competition.

Members of the Society are requested not to take any part in this Competition, the Committee having declined to alter the conditions which the Society consider to be unsatisfactory.

The Membership.

Elected.—S. B. Bradford, Eastbourne, E. Kirby, Nottingham, J. P. Lovell, Derby, *Students.*

Resigned.—H. W. Matthews, Derby, *Member.* D. Cooper, Rugby, *Student.*

Deceased.—Sir J. Benjamin Stone, *Hon. Member.*

Special General Meeting.

A Special General Meeting of The Society of Architects will be held at 28, Bedford Square, on Thursday, October 22nd, 1914, at 8 p.m.

Agenda :—

1. Minutes.
2. Scrutineers' Report on the Ballot for Officers and Council, 1914-15.
3. Nominations and Announcements.
4. Presentation of Students' Prizes.

Meetings and other Fixtures, 1914.

Date.		Time.	Occasion.
Sept.	30th.	6 p.m.	Last day for depositing Architectural Scholarship Drawings.
Oct.	1st.	4 ,,	Council Meeting to receive Nominations for House List.
,,	22nd.	4 ,,	Committees, Council, and Special General Meeting.
,,	,,	8 ,,	Members' Meeting. Presentation of Students' Prizes. End of Session.
,,	31st.	6 ,,	Last day for depositing Quarterly Competition Drawings.

THE
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The Society is not, as a body, responsible for the opinions expressed by individual authors and speakers.

Carry on.

Those who cannot render active military service at this crisis will do well to stick to their own business and not unduly embarrass the various Authorities with well-meant offers of assistance. Already there are signs of over-lapping and confusion amongst some of the relief organizations, and it seems to us better to concentrate on carrying on as usual and helping others to do so, and thus maintain and provide paid work rather than to give charitable doles to any who may need assistance.

It is false patriotism and false economy to contribute to relief funds with one hand and pay off or unnecessarily reduce one's establishment with the other. Our duty is not so much to provide for anticipated distress, as to take steps to prevent it by maintaining normal conditions in professional and personal matters to the utmost of our resources. This would be doing national service of the greatest importance to a considerable section of the community, and incidentally to the Empire.

The historic phrase " wait and see " has a peculiar significance at the moment. No one can forecast the length or the issue of the War, but all can deal with the passing moments to the best of their ability, and endeavour to maintain a calm and hopeful outlook. We hope and believe that the War will afford the profession such an opportunity of working together for the common good, and of forgetting architectural politics and personal interests, as should result in great benefit to all concerned. The " Architects' War Committee," on which all sections of the profession are represented, may well in more peaceful times develope into a permanent standing Committee for the regulation and control of professional matters.

The Beaux Arts Movement.

The First Atelier Club in London.

The system of architectural competition has been much on the increase during the past few years, while the growing recognition of the demand for fairer methods of assessment, and the success of some of the younger men, have induced many to enter the competitive arena, who might otherwise have remained lookers on.

The awakening of the younger architects, who have thrown off the shackles of unambitious servitude imposed by the old school of conservative practitioners (whose tendencies leant towards suppression of the ambitious instinct rather than to the encouragement of progress), has led to a keener demand for architectural education of a brisker kind than has hitherto been obtainable within the somewhat somnambulistic walls of the academic and, perhaps, pedantic educational bodies. This demand appears to be entirely met in the recently-established Atelier, which gives forceful evidence of having come to stay and has already lived down the considerable amount of adverse criticism raised at its inception, while the hard work and good results displayed by its members bear witness to the effect and progress made.

The members of the Atelier must be architects or students of a definite amount of experience, whose object is the promotion and acquisition of composition and design. Draughtsmanship and the "rendering" of designs though improved in the Atelier, is not the main object, and each member must have a thorough knowledge of construction before he may enter.

The Atelier is, in plain English, a design club for architects of all ages and comprises practising architects as well as assistants and students, who work on even terms. At present it is a consolidated, though small, body of men working with definite aims in view, who, in course of time, are bound to leave their mark on the architecture of the period.

Though much has been said of the detrimental influence of French methods drafted into Britain, there is, without doubt, much to be learnt from France, particularly in the art of planning and in the higher motives of design which give distinction and expression to good architecture, whether it be Continental or British. The rest may be left to the sober mind and commonsense of the student, who, be it remembered, is designing to please himself and his fellow-architect and countryman, whose taste, though it may change, is generally safely sedate.

The young architect coming to London from the Colonies for a period to study, cannot be better advised than to become a member of the Club, where he will obtain a wider and deeper knowledge and breadth of view engendered by healthy competition, and where he may polish his architectural wit against the most salutary and brisk criticism of the day.—L. SYLVESTER SULLIVAN, A.R.I.B.A., M.S.A., in the *Journal of the New Zealand Institute of Architects.*

The Architects' War Committee.

A Special Meeting (open to the whole profession) was held at 9, Conduit Street, W., on Friday, August 14th, 1914, at 4.30 p.m., to consider the best way in which architects can offer their services in the present crisis. Mr. Ernest Newton, was in the chair, and stated that the following suggestions have been made to him of ways in which architects could be of assistance at the present time:—

1. By offering their services to the Government, either collectively or individually, in connection with the building, equipment, inspection, and maintenance of temporary barracks, hospitals, etc., or for any other kind of work which they are qualified to perform.
2. By arranging to look after the work of young architects who are already called out, or who contemplate joining the Forces.
3. It had also been suggested that a subscription list be opened to enable architects to contribute as a body to the Prince of Wales's National Relief Fund.

Members of The Society of Architects were specially invited by Mr. Newton, to be present, and a number of them were able to avail themselves of his courtesy.

Amongst those present from the Society were the President, Mr. Percy B. Tubbs, Mr. Alban H. Scott, Mr. Thos. Wallis, Mr. P. M. Beaumont, Mr. Herbert Matthews, and Mr. J. Herbert Pearson, Members of Council; Mr. R. Goulburn Lovell, Mr. A. E. Whitburn, Mr. Albert E. Pridmore, Mr. A. Y. Mayell, Mr. A. E. Kingwell, Mr. J. F. Wetherell, Mr. C. Watkins, and the Secretary, Mr. C. McArthur Butler.

After a short discussion on the various points involved, the following resolutions were unanimously passed:—

1. Resolved that this representative meeting of the architectural profession offers its services to the Government in whatever capacity they can be most useful at the present time. Also that, subject to the consent of the Council, the R.I.B.A. offers to the Government the use of the Institute's ground floor Galleries; and that an intimation giving effect to these offers be forwarded to the proper quarters.
2. Resolved that the architects who are in a position to assist young architects who are already embodied in, or who contemplate joining the Forces, be asked to send their names to the Secretary of the Institute, and state what they are prepared to do.
3. Resolved that a subscription list be opened to enable architects to contribute as a body to the Prince of Wales's National Relief Fund.
4. Resolved that a Committee be appointed to deal with the matters connected with the foregoing Resolutions, this Committee to have power to add to its numbers, and to form such organizing Committees as may be required, the Committee to report to the R.I.B.A. Council from time to time.
5. Resolved that the President of the R.I.B.A. be empowered to form the Committee.

On Tuesday, August 18th, 1914, a meeting of the newly formed Committee was held, at which were present: Mr. H. V. Lanchester, in the Chair; Messrs. Walter Cave, Thomas E. Collcutt, G. Leonard Elkington, Claude Ferrier, H. M. Fletcher,

L. Rome Guthrie, Edwin T. Hall, Gerald C. Horsley, Sir Thomas Jackson, Bart., Ralph Knott, F. S. Leslie, R. Goulburn Lovell, Edwin L. Lutyens, Sir Alexander Stenning, Sir Henry Tanner, Percy B. Tubbs, Paul Waterhouse, Adam F. Watson, Sir Aston Webb, Maurice E. Webb, John E. Yerbury, C. Stanley Peach (Hon. Secretary), Ian MacAlister (Secretary).

MEMBERSHIP OF THE COMMITTEE.—The Chairman stated, on behalf of Mr. Ernest Newton, that, in accordance with the resolutions passed at the representative meeting of the architects held on August 14th, the following gentlemen had been invited to serve upon the Committee :—

PRESIDENT.—Mr. Ernest Newton, A.R.A.

VICE-PRESIDENTS.—Mr. A. W. S. Cross, Mr. George Hubbard, F.S.A., Mr. H. V. Lanchester, Mr. J. Alfred Gotch, F.S.A.

HON. SECRETARY.—Mr. E. Guy Dawber.

PRESIDENTS OF ALLIED SOCIETIES.—Mr. A. H. L. Mackinnon, Aberdeen Society of Architects ; Mr. G. Salway Nicol, Birmingham Architectural Association ; Mr. G. C. Awdry, Bristol Society of Architects ; Mr. J. Archibald Lucas, Devon and Exeter Architectural Society ; Mr. G. P. K. Young, Dundee Institute of Architects ; Mr. T. Forbes Maclennan, Edinburgh Architectural Association ; Mr. John Watson, Glasgow Institute of Architects ; Sir William Portal, Bart., Hampshire and Isle of Wight Association of Architects ; Mr. R. Caulfeild Orpen, A.R.H.A., Royal Institute of the Architects of Ireland ; Leeds and Yorkshire Architectural Society ; Mr. W. A. Catlow, Leicester and Leicestershire Society of Architects ; Mr. J. Alfred Gotch, F.S.A., Northamptonshire Association of Architects ; Mr. R. Burns Dick, Northern Architectural Association ; Nottingham and Derby Architectural Society ; Mr. A. F. Watson, Sheffield Society of Architects ; Mr. Glendinning Moxham, South Wales Institute of Architects.

PRESIDENT OF THE ARCHITECTURAL ASSOCIATION.—Mr. Maurice E. Webb.

VICE-PRESIDENTS OF THE ARCHITECTURAL ASSOCIATION.—Mr. H. Austen Hall, Mr. G. Leonard Elkington.

HON. SECRETARY OF THE ARCHITECTURAL ASSOCIATION.—Mr. H. P. Fletcher.

PRESIDENT OF THE SOCIETY OF ARCHITECTS.—Mr. Percy B. Tubbs.

VICE-PRESIDENTS OF THE SOCIETY OF ARCHITECTS.—Mr. E. C. P. Monson, Mr. R. Goulburn Lovell.

HON. SECRETARY OF THE SOCIETY OF ARCHITECTS.—Colonel F. S. Leslie, R.E.

Messrs. T. W. Aldwinckle, J. Macvicar Anderson, F.R.S.E., Herbert Baker, Reginald Blomfield, R.A., Walter Brierley, F.S.A., Sir John Burnet, R.S.A., Messrs. Walter Cave, Basil Champneys, H. Chatfeild Clarke, Max Clarke, Thomas E. Collcutt, T. Edwin Cooper, Claude W. Ferrier, Right Hon. the Earl Ferrers, F.S.A., Mr. H. L. Florence, Sir Ernest George, A.R.A., Messrs. W. Curtis Green, L. Rome Guthrie, Edwin T. Hall, Henry T. Hare, G. T. Hine, Gerald Horsley, Sir Thomas Jackson, Bart., R.A., Mr. Ralph Knott, Sir Robert Lorimer, A.R.S.A., Messrs. Edwin L. Lutyens, A.R.A., C. Stanley Peach, Sydney Perks, F.S.A., W. E. Riley, John Slater, Lewis Solomon, Sir Alexander Stenning, Mr. Leonard Stokes, Sir Henry Tanner, C.B., Mr. Paul Waterhouse, Sir Aston Webb, C.B., K.C.V.O., R.A., Messrs. Wm. Woodward, John E. Yerbury, J. E. Still, F. H. Wrench, Walter Gordon, Geoffrey Norman, S. D. Topley, H. A. Welch, Herbert Shepherd, W. Alban Scott, M.S.A., T. Wallis, M.S.A., Ian MacAlister, Secretary ;

and that the following gentlemen regretted their inability to accept the invitation :—

Messrs. H. B. Measures, F. B. Dunkerley, Gilbert Fraser, Sir William Emerson, and A. B. Burleigh.

It was therefore resolved that the following gentlemen be also invited to serve upon the Committee :—

Messrs. J. E. Still, F. H. Wrench, Walter Gordon, Geoffrey Norman, S. D. Topley, H. A. Welch, Herbert Shepherd, W. Alban Scott, M.S.A., and T. Wallis, M.S.A.

NAME OF COMMITTEE.—It was then resolved that the Committee be called " The Architects' War Committee."

OFFICERS OF THE COMMITTEE.—It was resolved that the following members of the Committee be appointed as honorary officers : Chairman, Mr. Ernest Newton, A.R.A., F.R.I.B.A. ; Vice-Chairmen, Mr. George Hubbard and Mr. Percy B. Tubbs ; Hon. Secretary, Mr. C. Stanley Peach.

WORK OF THE COMMITTEE.—The Secretary then submitted to the Committee the resolutions passed at the representative meeting of the profession on August 14th.

The Acting-Chairman stated, on behalf of Mr. Newton, that the question of the use of the R.I.B.A. Galleries would be discussed at a meeting of the R.I.B.A. Council, the same afternoon. He also read the following statement drafted by Mr. Newton :—

I hope to have an interview at an early date with Mr. Herbert Samuel, M.P., to discuss the question of the special employment of architects during the war. Mr. Samuel has already informed me that he will be glad to avail himself of our services if occasion arises.

With regard to Resolution No. 3, I propose this afternoon to ask the Council of the R.I.B.A. to make a substantial donation immediately to the Prince of Wales's Fund.

With regard to the distress which may arise in the profession owing to the war, I propose to summon a special meeting of the Architects' Benevolent Society Council to consider the situation, and, if it is found necessary, to send out a special appeal to the profession to contribute to a special War Relief Fund for the benefit of architects and those dependent upon them who may be in difficulties owing to the war.

APPOINTMENT OF EXECUTIVE AND GENERAL PURPOSES COMMITTEE.—It was resolved that the following gentlemen be invited to act as an Executive and General Purposes Committee, with power to add to their numbers : Chairman, the President ; Vice-Chairmen, Mr. George Hubbard and Mr. Percy B. Tubbs ; Hon. Secretary, Mr. C. Stanley Peach ; Messrs. H. V. Lanchester, J. Alfred Gotch, Maurice E. Webb, H. Chatfeild Clarke, Claude Ferrier, Edwin T. Hall, Sir A. Webb, W. E. Riley, Ralph Knott, L. Rome Guthrie, Paul Waterhouse, E. T. Richmond, H. M. Fletcher, and all the provincial members of the General Committee to act as correspondents for the Executive Committee, and that all suggestions received from architects and others with regard to the action to be taken by the profession should be referred in the first instance to this Committee for consideration.

The Acting-Chairman stated that it was proposed to ask the R.I.B.A. Council to afford all the necessary secretarial and clerical assistance to the Architects' War Committee and its Sub-Committees.

RESOLUTION No. 1.—It was then resolved that the Executive and General Purposes Committee be instructed to draft and despatch to the Right Hon. J. Pease, M.P., who has been entrusted by the Cabinet with the duty of receiving all offers of assistance in connection with the war, a letter embodying the general offer of help expressed in the resolutions.

RESOLUTION No. 2.—It was resolved that the following gentlemen be invited to act as a Selection Sub-Committee or Sub-Committees with power to add to their numbers: Sir John Burnet, Sir Aston Webb, Mr. J. Alfred Gotch, Colonel F. S. Leslie, Mr. E. Guy Dawber, Mr. G. Leonard Elkington, Mr. Reginald Blomfield, Mr. Max Clarke, Mr. H. A. Welch, Mr. Sydney Perks, Mr. T. Edwin Cooper, Mr. Wm. Woodward, Mr. John E. Yerbury, Mr. Henry T. Hare, Mr. G. T. Hine, Mr. John Slater, Mr. R. Goulburn Lovell, Mr. Gerald C. Horsley, Mr. Alan E. Munby, and all the provincial members of the General Committee to act as correspondents for the Selection Sub-Committee, and that the following memorandum prepared by the Chairman be adopted as a basis for the work of this Sub-Committee which should report to the Executive and General Purposes Committee: This Sub-Committee would be asked to compile lists of architects with particulars of their qualifications so that we may be in a position to give useful information to the Government or to any of its departments in connection with emergencies arising out of the war. The Sub-Committee would also act as an information bureau to help young architects who are called out for service in the manner suggested by Resolution No. 2. In doing their work it would be largely guided by the advice and knowledge of the provincial members of the General Committee, who would be asked to act as its correspondents in dealing with applications from various districts.

RESOLUTION No. 3.—It was resolved that the Executive and General Purposes Committee be instructed to open a subscription list to enable architects to contribute as a body to (*a*) the Prince of Wales's National Relief Fund, or (*b*) a special fund.

BENEVOLENT SUB-COMMITTEE.—It was resolved that the following gentlemen be invited to act as a Benevolent Sub-Committee with power to add to their numbers: Sir Robert Lorimer, Sir Alexander Stenning, Sir Ernest George, Sir Henry Tanner, Sir Thomas Jackson, Mr. A. W. S. Cross, Mr. H. W. Wills, Mr. H. Austen Hall, Mr. H. M. Fletcher, Mr. E. C. P. Monson, Mr. Herbert Baker, Mr. Walter Cave, Mr. Thomas E. Collcutt, Mr. Edwin L. Lutyens, Mr. Leonard Stokes, and all provincial members of the General Committee to act as correspondents for the Benevolent Sub-Committee.

MILITARY TRAINING.—The Acting-Chairman stated that after consultation with the War Office, the Architectural Association had decided for the present to take no action in regard to their military training proposals.

EXECUTIVE AND GENERAL PURPOSES COMMITTEE.—It was finally resolved that the Executive and General Purposes Committee be requested to consider the following points: (*a*) The desirability of issuing to the profession or to the public an appeal to carry on building work to the utmost extent during the progress of the war. (*b*) The desirability of urging the Government to make arrangements to allow the railways to carry building materials.

Support from The Society of Architects.

The Council of The Society of Architects, at its meeting on August 20th, unanimously decided to support the movement initiated by the R.I.B.A., by every means in its power, and to place at the disposal of the Architects' War Committee, the Society's premises and staff at Bedford Square, for the use of any of the Sub-Committee. They further voted a first grant of 100 guineas as a contribution to a fund to be formed for providing paid work for Architects whose means of livelihood is stopped by the War, and undertook to appeal to Members of the Society and their friends for generous contributions towards this fund. The Council has suggested to the Architects' War Committee that a professional employment Sub-Committee of that body should be at once formed to deal with the administration of this fund: firstly in determining those Architects in actual need of financial assistance in consequence of the War, and secondly, in evolving schemes of a useful nature by which these men may be temporarily employed, such for instance as offering small fees for measured drawings to be made of buildings of history, and architectural interests, schemes for the improvement of artierial traffic, or town planning improvements, etc., etc. The main object of this Sub-Committee would be not to distribute benevolent aid, but to enable a man to earn a small weekly sum in such a manner that at the end of the War the community would benefit by the work done.

The copyright of these drawings should belong to the man producing them, but the original or copies should be deposited with the Architects' War Committee for subsequent exhibition or publication.

The Council further suggested the desirability of a common appeal being made to architects by the Architects' War Committee, but that this appeal should be circularized by each Architectural Society amongst its own Members with a covering letter of support. The Society of Architects is willing to bear the entire cost of circulating the appeal and collecting the contributions to the funds from its Members and their friends.

The plans of Mr. T. R. Clemence, of Guildford, have been placed first in a limited local competition for the new Municipal Offices. The assessor, Mr. J. H. Norris, of Godalming, states that the chief merits of the plans were the way in which the architect had adapted them to the gradation of the site. He had provided a lower ground floor, and an upper ground floor, making use of the rise of the land. The lower ground floor would be used as the sanitary inspector's offices, stores, and a strong room, and the upper ground floor as a town clerk's office and the rate collector's office, and the floor above as the surveyor's department. Another good feature of the plan was the excellent way in which the corridors were lighted, and also the splendid drawing office which had been provided. The front elevation was good and the back elevation also. These were the merits, but there were some drawbacks. He felt it rather inconvenient that the main entrance of the building was to be at the south-east end. Another drawback was that the strong room occupied a position near an outside wall and close to the heating chamber, but he thought perhaps these details might be re-arranged. In other respects the planning was very satisfactory. In addition to the main entrance there was also an entrance at the north end, and probably in practice this would be most largely used by the public as it really gave access to all the floors. The estimated cost of the building is £4,266.

Registration News.

Architectural Politics in South Africa.

It is clear from a letter from Mr. Walter Reid, F.R.I.B.A., in the *African Architect*, that the Cape Institute suffers from the same disability as the R.I.B.A. in regard to any continuity of policy on the Registration question, and from the same cause.

It must be patent, says Mr. Reid, to all *intelligently* interested and concerned that the ills and fears referred to in your articles will be dissipated with the passing of an Union Registration Bill on proper lines. So far as presenting such a measure to Parliament is concerned, the main disturbing element in the past has been lack of continuity of policy on the part of the Association of Transvaal Architects, plus a modicum of self interest, vanity and narrowness of outlook displayed by a few individuals, to the detriment of the majority. These remarks may with justice be applied to other Architectural bodies in the Transvaal, jealous each of the others.

Each year a new Council is empanelled and a new policy instituted, with fatal results so far as achieving any real progress is concerned. The amount of hard work involved is too great, and requires more concentration of thought than it is fair to expect from any one body in a single year ; the more so as there are so many other bodies throughout the Union to be consulted before a definite and final document can be produced.

The ostensible remedy would be the appointment of a permanent committee, representative of each professional body in the Union, not unwieldly in number, and elected with full power to act, thereby ensuring continuity of policy and presentation of a draft Bill to the Parliament of the country within a reasonable time. Failing the adoption of some such method, there can be no reasonable objection to the Cape Institute proceeding with its own application for an Union Act in its own way, without any further reference to the Association of Transvaal Architects. As a matter of fact, as far back as 1910 the Council of the Transvaal Association of Architects left the matter entirely in the hands of the Cape Institute to promulgate such a measure, but succeeding Councils and Presidents thought fit to retract the undertaking given, for reasons best known to themselves, hence the misunderstandings and delays that have taken place. My advice to present and incoming Councils would be to revert to the original resolution and leave the matter in the hands of the Cape Institute, who can look at it with clearer spectacles than the Transvaal Association (with its rights secured by Act of Parliament) is ever likely to.

Qualification in New South Wales.

We are indebted to Mr. G. A. Roberts (Member), for a copy of the Registration Bill, promoted by the New South Wales Institute of Architects. The Bill provides (*inter alia*) that :—

QUALIFICATION FOR REGISTRATION.

Any person who claims to be registered under this Act shall be so registered if such person—

(*a*) holds some recognized certificate as hereinafter defined ;

(*b*) has attained the age of twenty-one years, and has for a period of two years before the commencement of this Act been bona-fide engaged in New South Wales in the practice of architecture, and who has made application for registration to the board within one year from the commencement of this Act ; or

(*c*) has attained the age of twenty-five years, and has been engaged during a period of not less than ten years in the acquirement of professional knowledge in architecture, and who has made application for registration to the board within one year from the commencement of this Act ; or

(*d*) has attained the age of twenty-five years, and has been engaged during a period of not less than ten years in the acquirement of professional knowledge in architecture, and has passed an examination before the board according to the prescribed regulations ; or

(*e*) has attained the age of twenty-one years, and shall have been a pupil or apprentice for a period of not less than four years to an architectural practitioner entitled to be registered under the Act, and had two years further experience to the satisfaction of the board according to the prescribed regulations :

Provided that no person shall be entitled to be registered until he proves to the satisfaction of the board that he is of good character.

RECOGNIZED CERTIFICATES OF ARCHITECTS.

The term "recognized certificate" means a certificate, diploma, membership, degree, license, letters, testimonial, or other title, status, or document granted by some university, college, or other public institution in a British possession or foreign country, and which is recognized by the board as entitling the holder thereof to practise architecture in such possession or country, and as furnishing sufficient guarantee of the possession of the requisite knowledge and skill for the efficient practice of architecture.

REGISTER.

The registrar shall enter in a register in the prescribed manner and on payment of the prescribed fee, the full names and addresses, date and description of qualifications for which registration is granted, and all other prescribed particulars of all architects, and shall transmit in the month of January in each year a certified copy of such register to the Chief Secretary, who shall cause the same thereupon to be published in the Gazette. A copy of such Gazette shall be prima facie evidence in all legal proceedings that the persons mentioned therein are registered according to the provisions of this Act, and the omission of any name therefrom shall be prima facie evidence that such person is not registered.

UNREGISTERED PERSONS NOT TO ASSUME NAME OR PRACTISE.

From and after the no person, unless registered under this Act, shall—

(*a*) take, use, or adopt the title or description of architect, either alone or in conjunction with any name, title, words, letters, additions or description implying or leading to the belief that he is qualified to practise as an architect, or is carrying on the practise of architecture ;

(*b*) or practise as an architect for reward.

PENALTY.

Any person offending against this section shall be liable to a penalty not exceeding *twenty* pounds for every such offence, and to a further penalty of *one* pound for every day during which such offence is continued.

CERTIFICATES.

No certificate required by any Act now in force or that may hereafter be passed or that is required by custom from an architect shall be valid unless the person signing same be registered as an architect under this Act.

Statecraft Troubles in West Australia.

Mr. G. Temple Poole, B.A., A.R.I.B.A., President of the West Australian Institute of Architects, speaking at the Annual Meeting said, "Of Registration one should say that, two years ago the encouragement vouchsafed to us by the Government, promised to place Western Australia in the forefront of British communities as possessing a beneficent and logical authority in the hygienic science and art of building. At that time the Dominion of Canada and South African States, were the only British dominions in which Registration of Architects had become law. The potential success of the demand for it in other quarters was promising, but still in shadowy shape. I regret to say our hopes have not been realised. The ephemeral troubles of statecraft prevented the introduction of our Bill to parliament. We are no nearer the attainment of this so desirable provision of protection of the vital interests of the community than we were two years ago. The efficiency as regards health and security, the amenity of life in this country, are unprovided for and left to the hazard. In other countries with enlarging populations, this laggard neglect is disappearing, as besides South Africa, both Canada and New Zealand, as well as the United States of America have legalised the regulation of architectural practice, and it seems likely that the provision will become law in New South Wales and Queensland shortly. New methods of construction, new materials, and the demand for the solution of economic social problems, make it imperative that building shall be conducted strictly upon scientific lines by persons trained to combine stability with economy, and under health giving and health protecting provisions in sanitation and asthetics. . . . . . In other countries and other communities, there is a recognition that the buildings of import and distinguished dedication should be contrived and designed by the best mind and best invention possessed by the community and country—or in the words of the President of The Society of Architects: 'The desirability is recognised of every public building being designed by the one man in the country who was best able to solve the particular problem involved, and this one man can only be discovered by a properly organised competition.'"

Is Registration Desirable?

A College-bred Architect.

In the course of an action brought by a builder to recover an alleged balance due on a contract with the Ennis U.D. Council for erecting artizan dwellings, it transpired according to a report in the *Irish Builder and Engineer*, that the architect was the surveyor to the Council, and was at the time about twenty-three years of age, that he was at college during the greater part of the time the work was in progress, that his qualifications for the position of surveyor to the Council which he only held while his brother was Chairman, were purely scholastic, and that he certified for over £3,000 worth of work while he was at college. It also appeared that he ran a bicycle shop. In the end there was a verdict for the plaintiff of over £600 (about half the amount claimed), and costs.

Competitions and Registrations.

By Philip J. Dear, m.a., Oxon.*

Might it not be possible to save all the expense and waste of labour in architectural competitions by a contest once and for all between the men ? No other profession submits to perpetual examinations. Why not have an examination before experts, in which anyone could prove himself exceptionally competent, as in the Honours tests at Oxford and Cambridge ; but with this difference, that no one could be forbidden to try again until he had satisfied himself by failure that he could not reach the highest standard ; and if he is convinced, who else shall question it ? There seems, indeed, something unfair in dubbing a man first or second class at the beginning of his career ; but experience seems to show that, unless in exceptional cases, the verdict would not be reversed by further trials ; still, as there are such cases, it is not well to make the too rigid rules of the old Universities the basis of new proposals.

I do not profess to set out here a cut-and-dried scheme, a law of Medes and Persians, never to be questioned or altered ; I am merely making a proposal to be considered and debated, which, if successfully carried out, might meet all questions of registration in a much more satisfactory way than anything that has so far been proposed. For any register must admit all who can show any pretence of coming within its scope, and so, for nearly half a century, the case would be infinitely worse than it is at present. Any duffer who chose to put up "Architect" on his gate-post could hardly be excluded, at least if he was able to prove that he had erected a pill-box of a villa, or even if he had advised ill-contrived alterations in any existing house. Every builder would take care that one member of the firm was registered as an architect, and so far from decreasing the number of those without any claim to real knowledge, the effect would be to make numberless mere house builders recognized members of the profession.

The truth is surely clear enough from the case of doctors ; anyone who has in his youth passed a fairly stiff and searching test in the knowledge of the time is put into a position of privilege and monopoly, in spite of the fact that he has made little or no attempt to keep up with the times, or advance beyond the modicum of skill which can be demanded of a student ; still, he is probably the best man in his neighbourhood to consult on an emergency, for he has been taught once the right thing to do, and has, for dear life, been obliged to maintain a certain ability in doing it.

The position of architecture is very different. If you had to shore up a falling house, or maintain a ruinous chimney, the local builders might do as well as any for the purpose ; if you wish to put up a stable cheap, or a small house, they will serve well enough ; but if you have a notion of a door with columns each side, or with an entablature resting on consoles, your task will be to get it done decently, in spite of these men. I have known a case of a house being built without a staircase, and a whole row without water-closets, which had to be added on brackets. Even where a so-called architect was employed, alterations are often mere bungles ; but is not this also the case frequently with doctors and lawyers ?

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* *The British Architect.*

What, then, is needed is to be able to select the men who are really competent ; or, at least, may reasonably be expected to be so ; but different men have various powers, and any plan should take count of this if it is to be a success. What I suggest is that the test should be under three heads : Design, Construction, and Cost of Materials. Design would include the history of style, and would be taught by an academic body, in order to neutralize the effect of passing fashion. The mathematical side of construction again needs very much more thorough teaching than generally obtains, and the consideration of materials may be spoken of as the coming question of the future. A thorough grounding in the relation of these to construction and design is the desideratum of the times ; until this is thoroughly thrashed out we can have no rational architecture. Iron and concrete have come to stay, and their proper treatment is the burning question of the hour. In each of these subjects there would be three or four classes ; a first class in any would imply exceptional ability ; second and third might be taken as better or worse average skill ; and a fourth as such proficiency as any man might attain by industry and perseverance.

If, then, a man got a first in design, he might be looked on as a competent draughtsman ; if to this he added a first in construction, he would be a really good architect ; and if to this even a second in costs, he might be taken as able to carry out anything put into his hands in an efficient way ; even a third or fourth in these would not of necessity exclude him. On the other hand, a first class in construction and material would be a reliable engineer or builder, who by a second or third in design would show his power of doing good artistic work ; while even with a fourth he would have been taught fairly.

A good class in design and material would mean a good ordinary architect ; and as the results of the examination would be published in a register, anyone could determine for themselves with ease the right man to use for their work.

But for fear that all this may seem too like a bed of Procrustes, I would allow everyone, subject to a rather heavy fee, to compete as often as he chose ; no one could then complain that he suffered injustice. If he were not content with the award of the contest in one year he could try his luck again. The experience of Medical Schools shows that more than three attempts at a degree are very rare ;

if then the fees were put at £10 10s. a subject, the qualification would cost £31 10s., and further attempts might raise this to 40 or 50 guineas. This would allow of three examiners in each subject at £3 3s. for each candidate; say two academical men in design and construction, and one in materials and costs, the rest being practical. Still, as a fact, the distinction between these would only be that the former would hold posts as teachers, but they might well practise also lecturing a few hours each week. A test of this part might be made very thorough by such questions as this: Design an arcade with columns of verde antique with bases and capitals of bronze, resting on pedestals of Resso antico inlaid with Sicilian marble; and suggest an appropriate floor of marble in various colours, and a coloured ceiling and suitable treatment of the spandrels. A drawing in water-colours or chalks showing the effect will count very highly in assignment of honours. Or, again: What would be the result of a pressure of so many tons on a girder resting at an angle on two supports, if it acted one-third way up from the lower of these, and one-sixth of it were supposed to be horizontal and the rest vertical? This is the simplest possible case of roof stress; but how few architects would care to tackle it? Not for usual work is there any need that they should (such things are worked out by tables), yet it is quite desirable that one should know the men who are capable of doing them. Bridge designing ought not to be beyond architects (if parents understood that a certain amount of mathematical knowledge is much more valuable for the purpose than a claptrap talent of freehand drawing). Some men are quite unable to attain the skill in calculation needed for good construction; others are hopeless in the matter of design, though quite ready with their pencils. In fact, originality is generally in inverse proportion to the power of copying; if you can steal your honours ready-made, why trouble your head or your hands about making them? But against this are the maxims that a new broom sweeps clean, and new wine should not be put into old bottles.

I believe the University of Oxford would be willing to take up such a scheme as I have suggested; and it has this advantage, that no one there is connected with architecture, so that it would be quite impartial; it would appoint a board to select examiners and draw up a syllabus. By a fortunate peculiarity, although residence is stringently enforced for a degree, none is needed in order to enter for any Honours examination. Women are constantly admitted to these without ever going there except for the test itself, and the same method might easily be used for architectural students. Two or three weeks in a town which has perhaps the largest bulk of genuine Gothic architecture in the world, besides examples of fair merit in nearly every other Western style, could do nothing but good to any candidate. The place, indeed, presents special advantages for a school of architecture, being but an hour's run from London, and this might in time develop with great advantage, for there are two professors and a teacher of art there, with practically nothing to do. A school of stone-carving could be started with the greatest ease, for there are endless examples to study, and a set of masons who have preserved the tradition of Gothic work almost unbroken. I was pleased to see a young workman carving from his own design in Edinburgh, and told him this was quite common in Oxford, having been set going again by Ruskin after a lapse from the prevalence of classic work. His answer was: "My master came from Oxford."

I throw this out as a suggestion, and should be very glad to see it discussed. It is, I believe, an idea which might solve better the questions of registration and of competitions; the latter are quite a new thing in architecture; the finest buildings of the world have all been done by appointing a competent man and relying on him to do the best that was possible in the matter; to exact a hasty outline only hampers his ability, even if the judges to whom it is submitted can be relied on. But, curiously, the effect of Assessors has been rather to postpone the external effect to the internal arrangement. How peculiar their position is may be seen from the discussion whether, if all the designs are too costly, you are to prefer that which is nearest in price to one which is better in architecture; and this tells still more strongly if some are good and others are within the price.

Architectural Competition.

The Australian Government announces an International Architectural Competition for the purpose of selecting the architect of the Parliament House, and possibly, incidentally, an additional architect for other Government structures of the new Federal Capital City, Canberra.

Only tentative outline sketch designs for the building are requested, and eight (8) prizes are offered aggregating £6,000, the first being £2,000, in addition to commission for service at the scale of the R.I.B.A.

The designs may be submitted in either Melbourne or London by the end of March, and will be judged by the following jury of architects, whose decision will be final: George T. Poole, of Australia; Sir John J. Burnet, of London; Victor Laloux, of Paris; Otto Wagner, of Vienna; Louis H. Sullivan, of Chicago.

The Programme will be issued to any practising architect on application to the High Commissioner for Australia in London, or any British Ambassador.

The importance of this event is not to be measured by that of the foremost building of the Commonwealth, but by the opportunity to establish an architectural standard, not only for the future seat of Government in Australia, but for a great new Democracy of scope, scale and modern advantages, as well as of climatic conditions differing radically from any prototype in Europe or elsewhere.

Royal Sanitary Institute Congress.

In continuation and completion of the series of summaries of some of the papers read at the recent Congress, some of which were published in our last issue, we now append the following:—

Economical
Supply of Hot Water to Artizans' Dwellings.

By Alderman Henry Burridge.

The problem of how to supply hot water for baths and culinary purposes at a very small cost, more particularly for small dwellings, has or many years taxed the energies of hot-water engineers and other experts, and much progress has been made. The writer of this paper fully believes that the system he has adopted supplies a long-felt want.

In the kitchen is fixed a range with flues communicating with the copper, built directly at back in the scullery in the usual way. Between the copper and range is fixed an horizontal damper to shut off the heat when not required for the heating of the copper. The usual copper furnace door and frame is fixed; in front of this is an air-tight door and frame; by this means the copper furnace is made air-tight. When the copper is required for washing purposes this door is removed and the copper used in the usual manner. There are also three soot doors.

The copper is provided with a cold supply, entering near the bottom, connected direct to main supply, and controlled by a stopcock, an open draw-off being fixed close to the top and continued over bath. The connections to the copper being easily detached to allow for removal of copper if required, without disturbing the brick or other pipes.

Having so far described the installation, let us see the result. The stopcock was turned on, copper filled, range fire lighted, air-tight door placed in position, the horizontal damper lifted. The heat from range then passed through the flue at back and circulated round the flue of the copper, from thence up the chimney, and in less than forty minutes the water was hot, although the brickwork in copper and range was cold and new. The next day after the fire had been working and the cooking done and damper again opened, the water was raised to almost boiling point in a very short time. This result was obtained from the surplus heat, or heat that would have been passing up the back of range flues instead of, as in this case, circulating round the copper and giving the household hot water at a minimum cost.

A further test was made in the morning before the fire had been lighted. The water in the copper was found to be hot enough for a bath, although it had been standing during the night.

By the system here described it will be seen that the copper *always stands full of water*, and the supply of hot water can only be obtained by turning on the stopcock and running in the cold water at the bottom. This raises the hot water, which then flows out of the top pipe into the bath. The life of a copper under these conditions would be two or three times longer than under the ordinary conditions. Another great advantage claimed for this system is the alternative method of heating by the use of the ordinary furnace below, the furnace pan, the range damper in this case being closed, giving the advantage of having the water invariably hot to commence with, or before the furnace is lighted. Perhaps some people may have an objection to having a bath in the scullery; if so, the system here adopted can be utilized in any part of the house on the ground floor.

The bath in the scullery takes up no room. When closed it forms a table or a place for the soiled linen. It is close to the glazed sink, with tap over same, the equivalent of the lavatory basin and entirely private, and is always warmed by the hot water in the copper. I have worked out the cost, without fixing. The *range, bath, copper pan,* dampers, soot doors, and stopcock connections is £10.

Country House Sanitation.

By W. C. Tyndale, M.INST.C.E.

The point in connection with which the sanitation of the country house requires the greatest consideration, is the disposal of sewage. The rough and ready, and easy, way of getting sewage out of sight and out of mind, available to our forefathers, *viz.*, by discharging it into a ditch, a stream, or a river, is no longer available, and, in consequence, the operation has become, in most cases, anything but easy. Given a house situated on an elevated site with ample acreage around, and subsoil of a porous nature, the problem may be still fairly easily solved, either by adopting surface disposal, after straining or liquefying, or by soakage from sub-irrigation drains, or by means of a soak well, the latter only being admissible if water supply considerations do not interfere. But cases where all the desired conditions exist are not often met with, and it may be more frequently found that the site is flat, and then begin the real difficulties. In such a case the sewage has to be lifted. The engineer will naturally look in the first instance for natural local power in the form of a stream of such sufficient volume and head as to be capable of being harnessed to the required work, either by wheel or turbine, or by air lift; possibly electric current may be available from the lighting installation, but failing all these, a gas or oil engine must be used, and here follows another difficulty. A man must be found to attend to such engine.

Immediately it becomes necessary to raise the sewage, every effort should be made to eliminate all liquid which it may be possible to deal with separately. All rainfall should be rigidly excluded from the sewage drains. Stable drainage should, if possible, be treated separately, and even bath-water may sometimes be dealt with by sub-irrigation under the garden. Laundry water, is frequently the bane of the sewage engineer. This cannot easily be treated separately, but its effect on sewage purification, owing to its large volume, its intermittency, and its nature, requires to be specially considered. The best way of dealing with this is to cause it to discharge into a separate tank, where its solids are precipitated, and where the supernatant water may be let out through a regulated valve, which will, in a great measure, counteract the intermittency of the flow. Consideration may also be given to the provision of earth closets towards minimizing the sewage volume. The rural conditions will render the adoption of these very suitable arrangements for out-door positions, and easy of maintenance. The necessary earth is always at hand, as are also opportunities for the disposal of the contents of the pail. The only difficulty at all in connection with the latter operation is the presence of paper, but this objection disappears if a method is adopted which is practised in connection with my own house, *viz.*, to burn the paper before the earth is applied. In this case of a self-acting apparatus this would not be so. The sewage disposal may also be facilitated in some measure by the elimination, as far as possible, of the greases which come from the house, and for this purpose it is well to introduce fat traps, instead of ordinary gullies, at those points of sink waste discharge where fat would pass into the drains.

Again, take a case where not only is the site flat, but the soil is heavy clay. These conditions at once necessitate the introduction of artificial bacteriological means of purification. The general principles on which these devices are all based are the well-known ones of liquefaction and clarifying of the sewage as a first stage, and subsequently of dealing with it in oxidizing bacteria beds or on sprinkling filters. Of all the arrangements devised for effecting the first stage of the process, the Dibdin "Slate-bed" is probably the best, as it most nearly conforms with the processes of nature, and obviates bad odours. It is not, however, as popular as it might be, from the fact that it works on the intermittent contact principle, involving manual labour or automatic contrivances to effect the alternation required. A much more popular device is the well-known septic tank which admits of continuous working, and to some extent liquefies the solids of the sewage, and produces a more or less clarified effluent. Its action, however, is attended with the formation of sludge, and the evolution of foul odours. These disadvantages have been thoroughly recognized, and the place of the septic tank is frequently taken with great advantage by the semi-septic tank or " pot," reducing the sludge to a minimum, minimizing the odour, and only requiring the removal of scum at frequent intervals, an operation which may be performed by a gardener or a handy-man about the premises.

Passing on to the second stage of purifying the sewage by oxidation, it may be said that these generally consist in (*a*) applying the sewage in volume to beds filled with furnace ash, coke, stones, or other small indestructible material on the contact principle, or (*b*) by spraying the liquid over beds formed of material, as previously mentioned, by means of sprinkling arms, weeping troughs, or splashing devices. All or any of these will, if properly designed and of right dimensions, effect the oxidation of the sewage. The question of which form of installation shall be adopted is one which can only be determined by the sanitary engineer after taking into consideration all the necessities and circumstances of the case. One of the very numerous difficulties with which the sanitary engineer has to contend is that of the variation of volume of sewage to be dealt with at different times. It cannot be said that such difficulties may be met by making the installation large enough to deal with the maximum, as it is well known that the septic tank, which is suitable for a volume of sewage of 500 gallons, may have its action upset by having to deal with double that amount, while, if only a quarter of the sewage or less comes down, the sewage may be over septicized. Nor can it be said that oxidizing bacteria beds and filters, if based on a provision for the greater volume, will work equally well with a minimum, and the resultant effluent, instead of being of a satisfactory quality, may be impure, and lead to trouble with neighbours or receipt of unkind letters from a local authority, or an inspector of a river conservancy. This is one of the greatest difficulties with which I am acquainted in connection with country house sewage purification. The problem may generally be solved by designing the installation in parallel halves capable of working as a whole to deal with the larger volumes, or in part, to take a reduced volume, but even then the dimensions must be such as to afford elasticity for moderate variations of volume. In addition to this, reliance has to be placed on the attention to the works by someone to make the necessary alteration in the valves required by greater variations in volume. There are other difficulties, such as failures due to inattention, failure of the apparatus used to work properly, and others, which will readily occur to the minds of those who have had any experience in this class of work.

Country house sewage purification is not one which can be dealt with by the enthusiast with a " nostrum " ; unhappily it sometimes occurs that a householder falls into the hands of such an one, with results tending to the waste of money, and much vexation of spirit. Again, I have seen instances where the money has been wasted, not on an improperly-designed installation, but by introducing one which was more elaborate and complicated than necessary, and where a very simple process would have sufficed to do all that was required. The pecuniary aspect of the case is another of the many considerations, and one which demands looking into; in fact, it is frequently of primary importance. It will be within the experience of many that some simple arrangement has been the means of purifying sewage in a most unexpected way. I have seen the sewage of a country house, of considerable size, entirely dealt with in a satisfactory way by means of a slate bed, alternated twice a day by the gardener, and soakage in a ditch, without nuisance. This was, of course, on porous subsoil. I have also in mind a case where the sewage of a fairly large house was satisfactorily dealt with by passing it through two straining baskets in succession, and splashing it twice by means of tapping troughs over coke beds, the effluent afterwards passing into a small pond adjoining the garden, where cattle drank and ducks disported themselves. I mention these cases, as although very great care has been taken to ascertain what are the really requisite conditions necessary for purification of domestic sewage, it would seem that we have not yet arrived at a full knowledge of them, and that it is not always the most elaborate methods which produce the best results.

The Basement House, from the Public Health Standpoint.

By Mrs. Cloudesley Brereton.

Modern sanitary science says that the basement house must be ended or mended; the basement as a "living" place abolished or remodelled. The remodelling of the basement house either for service purposes (as in the case of the more expensive town houses) or as cellars, furnace rooms, etc. (as in the smaller houses), is a sanitary work worthy of the consideration of the progressive landlord as a strictly business and paying proposition.

The basement house, especially in good districts, may once more come to its own, because the modern sanitary engineer can, by dispensing with cumbrous solid fuel, by installing lifts and other labour-saving appliances, very well transform and give a new lease of life to property which might otherwise hopelessly depreciate beyond repair. A basement can only be dispensed with as a "living" place where modern space-saving, labour-saving and dirt-saving methods of cooking and heating are installed, and where coal-cellars, ashbins, etc., become unnecessary.

From the point of view of the mistress of the house, architecture is largely to be considered in terms: *(a)* Of health and happiness; *(b)* Of domestic labour. The latter may perhaps without exaggeration be regarded as the more important of the two, because the successful or unsuccessful working out of the labour problem in any household is the foundation of its health and happiness or the reverse. This labour involves both the mistress and her maids, and embraces every type of house from the poorest to the richest.

We are all faced with a servant problem, which is, of course, equally a mistress problem in more senses than one; but it is much more a landlord's problem than anyone has so far supposed.

The kitchen quarters, where your food is prepared, cooked and stored, are more important to the health of the house than the furnishing and decoration of the dining room or drawing room, or even the ventilation and the warming of the bedrooms.

The question of modifying out-of-date houses is one that must be seriously considered before any attempt at engaging really educated women as servants can be thought of. And the defects of these houses are, to my mind, responsible for a very large proportion of what we call the servant problem to-day, for we have educated and given wider and loftier hopes to the girls of what used to be our servant class; we have helped them to move forward in every direction if they so desire; we have aroused in them a discontent, divine or otherwise; but we, ourselves, providing we refurnish and refurbish our dining rooms, drawing rooms, and bedrooms to bring them up-to-date, too often have been content to allow our basements to remain very much what they were twenty, thirty, and forty years ago.

All the arguments of science or ethics will avail little if a financially unsound scheme is put forward. Mr. Roger Gibb, speaking from the barrister's standpoint, was doubtless right when he said that a very large proportion of the basement property in good districts stood empty because they were portions of trust property, and because through mistaken finance and a want of imagination as to what might be the fate of any type of house twenty years or more after it was erected, no appreciable sum had been set aside from income to pay for any drastic repairs or remodelling. He very rightly pointed out that it would obviously not be in the interests of the public that trustees should try experiments unless they had adequate precedent for supposing that they were doing what was in the almost certain interests of those for whose property they were responsible. He therefore hoped that landlords who were at liberty to experiment on the lines suggested in the paper would do so, in order that trustees might, if these schemes proved successful, feel that they were justified in doing what was necessary to rehabilitate the trust property which was now going into decay to the great disadvantage of those, frequently widows and orphans, who were dependent for income and for schooling upon rents to be derived from letting the property.

In view of this practical point raised by an experienced lawyer it would be interesting to find out what proportion exactly of basement property now going into decay is doing so, not because of want of enterprise, but because the present owners are not really free agents.

Dispensing with Basement Kitchens in Basement Houses.

You will, perhaps, be puzzled at the outset as to how I am going to make up for the two rooms, at least, of which I shall rob every house by abolishing the old basement. In answer to this, I would say at once that in the large town house, with anything from half-a-dozen rooms underground or partly underground, I should not attempt to abolish, but should entirely remodel and make sanitary the basement which exists. These huge mansions are a problem in themselves. But if owners are willing to spend money there are few things that the sanitary specialist cannot do, though, unfortunately, he cannot always manage to provide daylight. Speaking broadly, in all other cases the loss of, perhaps, two rooms or their partial loss would be almost, if not quite, compensated for by the much smaller space that gas cookers, etc., would take compared with the old solid fuel type with their accompaniments of coal, such as coal cellar, cinder-box, cinder-sifters, housemaid's box, black-lead brushes, flue brushes, and much of the other paraphernalia which fills up the kitchen quarters.

The basement rooms would become valuable cellars and store-rooms, and it would be advisable where servants were kept, or charwomen or other outside help employed, to retain a good modern lavatory, approached from the inside of the house, in the basement, together with a fixed washstand for washing the hands decently, a most important sanitary point often neglected in servants' lavatories.

Six properly planned rooms might be made to give actually more accommodation if the basement rooms were turned into cellars and work rooms, than do eight rooms badly lighted and badly planned, where servant and mistress alike are made melancholy and delicate. It is a question of entirely altering our ideas of housekeeping, and of what a house should and should not be. When an eight-roomed house has practically only six rooms fit to live in, or a ten-roomed house only eight rooms fit to live in, the landlords should wake up to the change in public opinion upon matters of hygiene with regard to the housing problem, be prepared to "cut their losses," and let them as six and eight-roomed houses respectively, instead of as eight and ten. I do not believe they would have any further losses than those they have already sustained during the empty period, for there are an increasing number of people looking for small houses fitted up in ideal ways as to modern labour-saving appliances, which could be worked with one servant, no servant, or a visiting servant, so long as they are in a good neighbourhood. A properly remodelled house would, therefore, in most cases fetch at least as big a rent as a larger one if out of date. Moreover, it must not be forgotten that the old-fashioned basement was lumbered up with coal cellar, spare coal scuttles, fireirons and miscellaneous cleaning materials, now almost obsolete and entirely unnecessary in a modern house with no solid fuel. It must be remembered, too, that the fewer servants there are, the less of everything is needed, less food and feeding space, less bedrooms, less accommodation in kitchen and elsewhere, and there is less expense all round. Such houses are being eagerly sought for, and if landlords do not wake up and remodel, they will before long find their property so derelict that they will have to pull down and rebuild.

SHOULD PROPERTY BE SCRAPPED.

Some critics have suggested that in this advice as to regeneration and remodelling, I have dealt with the question as if houses have an indefinite lease of life; whereas, on the contrary landlords should consider their property as manufacturers consider their plant, viz.: as having a few years of effective service and as then being fit only to be scrapped.

There is of course a germ of sanitary truth in this statement; and the sensitive sanitary conscience could wish, especially in houses built for those who have not yet developed a sanitary conscience, that some less durable materials than those commonly used might be employed so that the house could be destroyed at intervals of ten, fifteen or twenty years. This latter is a theme with almost endless possibilities; but I do not intend to be tempted into dealing with it here.

In time, doubtless, the underground kitchen and everything appertaining to it will have to go, in an enlightened age caring more and more for that true wealth which is health. But this desirable end will come more quickly, and with less friction of all sorts, if the best is made of existing houses than if hundreds of houses stand hopelessly tenantless until they decay and have to be pulled down. And this is true for the one sound economic reason that, if landlords can by a few years of temporary compromise keep their older houses well let so that they derive reasonable profit from their rentals they will have the steady income to gradually pull down the very worst and rebuild a few at a time. One fact only landlords must wake up to, and that is that in these comparatively "fat years" they must deliberately put aside a sum for this steady rebuilding unless they mean to face some very critical "lean years."

If they will but use imagination and foresight now and anticipate public opinion in public health, all will be well financially. And if the financial difficulty can be solved, there can to my mind be no question as to the right course from the sanitary standpoint.

A Doctor's solution of the problem appears, very properly, in the "Appendix," which also contains numerous plans by Mr. E. C. P. Monson, M.S.A., the architect to the Sutton Trust, illustrating the author's suggestions for dealing with basement property of the better class.

Domestic Architecture and Sanitation.

By Walter Cave, F.R.I.B.A.

It is generally supposed that an architect's connection with the sanitary conditions of a house is summed up in the one word " drains," but there are other matters which come within his province which have a great deal to do with the health and comfort of the inhabitants.

Dirt of all kinds is one of the greatest enemies to health, and its evil effects can be largely avoided by taking due precautions in designing the details of a house and its fittings. For instance, the floors of sculleries, kitchens, larders, bathrooms, water closets, etc., which it is usual to make of some hard impervious material, such as tiles or cement, should be made to join the walls with a hollow angle.

Cement floors are inclined to become dusty with wear, and are cold to stand on. A distinguished architect lays these cement floors in the offices of his houses, and after they are thoroughly dry, has linoleum or a cork carpet glued direct to the cement, with good results.

Hard wood floors, such as oak, teak and maple, are better than deal, but where deal boards have to be employed, they should not be washed with a scrubbing brush, as this tends to make the floors swell and then contract, so that the joints eventually become wide open. The best treatment is to stain and wax polish the floor boards so as to ensure a hard surface, which should be wiped over with a damp not wet cloth.

Another important point is the window, generally the only means of ventilation, both its position in the wall and its construction. From the point of view of health the top of the window should be near the ceiling, and that part nearest the ceiling made to open easily. If the window is a sash one, this is easily achieved, but with the casement it is not so simple. Should there be a transom, there are many methods of opening the upper lights involving gear, or cord, or a pole, but all those appliances are of a more or less complicated nature, and, as these lights are usually inaccessible, care should be taken to select the simplest form.

The cleaning of windows must not be overlooked, and the casements which have a hinge half way along the sill so that they open both outwards and inwards are very easily managed, and unless in a very exposed position are watertight.

Again, the position of the window in relation to the door, bed and fireplace is a matter that often seems to be left to chance or entirely subordinated to the exterior elevation. How often do we find, especially in hotels, a fair-sized bedroom, in which it is impossible to put a bed without its being in a direct draught, a very serious mistake which is often impossible to correct.

Dirt and dust can be minimised nowadays to a large extent by the use, where possible, of electric light. There is also the vacuum cleaner, which has now become a simple and economical method of getting rid of dust in the household.

Another distracting cause of dirt is the hot-water pipe. The greatest care should be taken in casing it and covering it with non-conductive material, though this latter is often a horrible mass of dirt, and only hidden by a thin casing of wood, which is usually cracked at all its joints, which are in perpetual mourning with their black edges. How can this be overcome ? Firstly, what is the cause ? The pipes being hotter than the wall of the room, there is a constant current set up between the hot and the cold surfaces, and, where this takes place, the dirt floating in the air is deposited on the rough edges between.

Another instance of this, and one which is not always understood, is that one often sees a white line in the corner of a room, especially where the inner wall joins the outer. This again is due to two surfaces of different temperature. The outer wall, varying with the outside temperature, is generally several degrees hotter or colder than the inside walls, hence a current of air is set up between the two ; and, as a current does not enter an angle with the precision of the paperhanger, it shirks the actual corner itself and deposits the dirt on either side, leaving, as I have said, a white angle innocent of dirt. This, to a large extent, can be avoided by again a precaution in the first place. A good hollow outer wall, with its air cushion, is an excellent non-conductor, and when the two walls are the same temperature no draught is set up. The greatest care should be taken with all joinery in a house ; and here again the architect comes in, and money spent on good joinery is well spent.

The amount of dust that can be collected in book-shelves is extraordinary, and in towns bookcases should have glass doors.

Amongst the many details in a house that require special attention, are the sanitary fittings. Baths, for instance, should not be cased in, and should stand clear of the wall so that they can be easily cleansed, and should be carefully selected so that they empty themselves quickly and thoroughly. The same also applies to lavatory basins and sinks. Cupboards frequently placed under both the latter fittings should be avoided as they are generally receptacles of all kinds of rubbish which collects dirt and dust.

Wardrobes and cupboards should all have a floor of their own raised a few inches above the floor of the room, not only to facilitate cleaning out, but to prevent the dust on the floor entering under the doors whenever the room is swept.

Dust traps should be avoided as far as possible, and can be, with care and thought in designing a house and its fittings, not to mention furniture.

These remarks apply more particularly to town houses, where dust is ever present ; but, even in the country, this cannot be avoided altogether, and the same care in designing is required. The open fire, almost a religion amongst English people, is responsible for a great deal of this dust ; but the more modern kinds of slow combustion grates, with a grating through which the ashes fall into an enclosed receptacle, can reduce this dust to a large extent, and are certainly a most economical form of the open fire. Gas fires and gas cooking stoves are gradually superseding the open coal fires, and are cheap and efficient, and overcome many of the above objections and help to minimize work, which is, needless to say, an important point in domestic economy to-day.

Cupboards, the delight of womankind, should be lit if possible. The opening of the door so as to let the light in is often neglected.

The old houses which delight the housewife with their deep cupboards, which were usually hideous dust-traps, were often due to thick walls and to bad planning, or rather to no planning at all.

The careful planning of a house with a view to economising service is becoming more and more important, and the inside lines of communication between the various parts want careful attention. Again, the position of the larder is very important from the point of view of health. How often do we find it placed between the servants' w.c. and the coalhole, and the dust-bin under the window outside.

The constant use of whitewash in outbuildings is greatly conducive to a general healthy state of things. It is to be regretted that in many places people are getting above it, or only practise it where compelled to do so. Disinfecting whitewash can be made simply and cheaply by adding carbolic acid to the ordinary lime wash, but there is a point in connection with limewash that comes within the architect's province, and is one of those items I have mentioned which, if overlooked during the building of the house, cannot be easily rectified. Whitewash is usually put on an unplastered brick wall, but, if the bricks are wrongly pointed, these walls are great receptacles of dirt. The usual builder's way of pointing brickwork is to hold the point of the trowel downwards, which produces an inverted weather joint which leaves a ledge ½ inch to ¼ inch wide on the top edge of every brick, on which the dust collects. The trowel should, of course, be held with the point upwards, so as to have no shelf or ledge. It is astonishing how difficult it is to ensure this unless it is specially made a point of.

Again, the storage cisterns for drinking and ordinary domestic water require special attention. They are frequently placed in the roof, which in itself may or may not be properly boarded and dust proof. Generally it is not, and the condition of these cisterns holding the drinking water for the house are disgusting. They should always be properly cased and covered in, easy of access, and lit in such a way that they can be readily cleaned. In towns where there is a supply from some company a tap should be always placed on the main for drinking purposes before the water enters any storage cistern.

The above remarks do not by any means exhaust the subject. I have purposely not touched on the main points of an insanitary house, namely, the drains and the sanitary arrangements, about which many books have been written, and concerning which most people have some acquaintance, and with which are connected a great body of highly-trained and skilled professional men, not to mention the sanitary boards with their ever-vigilant inspectors. These are what may be termed the obvious points of healthy houses.

I have endeavoured to point out a few of the minor points in the building of houses which mainly concern the architect and have a decided influence on the health of the future inhabitants, and though these points may seem small and trivial I believe that it is in the attention to them as well as the more obvious ones that a more sanitary condition of things will obtain.

Electric Motors and Smoke Abatement.

The Displacement of the Factory Chimney.

In the Annual Report of Mr. S. J. Watson, the Borough Electrical Engineer of Bury, it is stated that " one of the claims often made in support of the use of electric motors for industrial purposes is that the health of the community will be improved by reason of the fact that fewer chimneys will be required, and consequently there will be less vitiation of the atmosphere through the emission of black smoke. Considered from this point of view, it is of interest to state that through the adoption of motors, twenty-four chimneys in the Borough (of Bury), which were previously required for the production of steam power have been placed out of commission, and twenty-seven other consumers would have had to provide chimneys had electric power not been available. The one large chimney at the power station is, therefore, being used instead of fifty-one smaller chimneys in other parts of the town."

Mr. Watson also calls attention to the fact that the fuel consumed at the power station is delivered direct into the bunkers from the railway siding; whereas, had fifty-one chimneys been in use, upwards of two hundred tons of fuel a week would have had to be carted for considerable distances through the public streets. Thus does the electricity supply undertaking assist to minimize traffic congestion. Mr. Watson might also have added, perhaps, that the fuel consumed at the power station is burnt in a scientific way so as to produce the minimum of smoke; this could probably not be said in connection with at least a large number of the superseded furnaces. Without doubt electric driving, by its increasing use, is rendering valuable assistance in the direction of smoke abatement. *The Electrical Times.*

Architectural Garden Design.

Mr. H. A. McQueen, in the course of a paper read before the Cape Institute of Architects, says: Heated controversies have been waged over the rival advantages of the formal and informal gardens. In other countries we must admit that the former, hold the field at the present time, and let us hope will continue to do so. Can you tell me why, in the laying out of a garden, human thought and skill should be eschewed? In everything else the evidence of the skill of man is deemed to ennoble and beautify whatever he applies his energies to. Why not a garden? If it were possible to allow nature to go absolutely untouched, or to be in a position to abandon the struggle to make nature beautiful around the house, and move the house to where nature is beautiful, then there would be arguments in favour of the informal garden, but we humbly represent that a long-suffering profession has to build on the site their clients provide. That being so, we face the position and make nature subordinate to the house.

As to sites, much could be written. Sir George Sitwell in his book on the making of a garden, says: "The house is to be vast and austere where the note is one of grandeur or ruggedness; sweet and low where nature is in a smiling mood; tall, in a level plain; rich with coupled shaft and sculptural friezes and cool colonnades, if it face a quiet prospect; great and dignified, in a country of mighty trees." That advice I think is for the architect who is of the landscape school, where he leaves nature alone and suits the design of his house to the surroundings. Now we, as architects, would naturally treat the garden architecturally, and you cannot have architectural treatment in the naturalistic.

Although nature must be made subordinate to the house, I do not mean that we must ignore entirely the site. By carefully considering the natural advantages of the site we shall be helped considerably in our task. Here I will give you the principle which Mr. J. D. Sedding says governs the best modern work: "The gardener's first duty in laying out the grounds is to study the site and not only that part of it upon which the house stands, but the whole site, its aspect, character, soil, contour, sectional lines, trees, etc. Common sense, economy, nature, art, alike dictate this. There is an individual character to every plot of land as there is to every human face, and that man is unwise who, to suit preference for any given style of garden, or with a view to copying a design from another place, will ignore the characteristics of the site at his disposal." You cannot adopt a fashion, because no fashion is capable of general application, and to adhere to a set formula would be working against sound artistic principles.

In this country we have everything that an artist could wish for. We cannot slavishly copy the gardens of England, but the study of them is beyond doubt exceedingly helpful. The gardens of Italy would be more suitable if it were a question of copying, and it was from Italy that England learnt the art of gardening. In our efforts to revive the art of garden-making we ought to base our practice on what is best in ancient traditions, and to refer to well-established records for guidance as to what we would avoid. It is only comparatively quite recently that architects have taken up garden-designing seriously, and it can be safely said that much good has come by their so doing. In the laying out of the ground of any house, the whole must be planned with due regard for architectural effect. The same care must be given to every line, every mass, and every detail, as would be given to the design and construction of some good piece of architecture.

In Italy the gardens of the larger sort, unlike those of England, are placed on hills, much as the sites we have in this country. This at once gives the architect an opportunity of showing his skill in designing terraces, balustrades, and steps. We find that the Italians introduced water wherever possible in their designs ; indeed, the hydraulic engineer appears to have been almost as important a person to consult as the architect. They, however, were placed at this disadvantage, that bowers were no part of the scheme and scarcely came in at all. Architectural features and evergreen trees were the principal factors in considering the effect to be produced. Large masses of flowers were not obtainable, and consequently we get beds of box with coloured earth to take their place. This was an expedient to get colour and variety which would easily be obtained in this country by flowers. In this we can take a lesson from the gardens of England. I do not know if there is another country where bowers play such an important part in the design of the garden as in England.

Flowers can be introduced almost anywhere, but to be seen to advantage one should suddenly come upon an opening in some cool and shady path and look upon the flower beds. It is surprises of this sort that go to make the garden a success. One of the pleasantest ways of setting flowers is in a long border. To the appreciation of its full beauty, it should be seen end on and should be arranged to this end, and with advantage, of great length. Hampton Court along the east front will occur to those of you who know the place. There there is a border a quarter of a mile long and six feet wide. Lovely flowers at the edge mount to taller and gorgeous ones at the back. The effect is splendid, and there can be no finer sight than this glowing mass of colour set against the old weather-beaten wall of brick and stone. I have endeavoured to point out the fact that we, in this country, have as much at our command as both England and Italy, where such magnificent work has been done, and yet we do not appear to take advantage of what we have. When we study the gardens of England and see how she has learnt from other countries, how much more easily ought we to be able to develop the garden in this country ! Indeed, with all the material at hand we are, I honestly believe, in a position to bring the art of garden-making to a level never before attained.

It is the site that will decide for you the manner of your garden. On a level one, the terraced garden is out of the question; whereas, if the site be on an eminence, then the terrace will be at once decided upon. I think water ought to play an important part in all gardens. The early settlers made much of the little water, even to the extent of wayside furrows and canals in the public streets. Shade can be introduced in many ways. There is the avenue, a most important factor in designing large gardens. The author (Blondel) of the *Theory and Practice of Gardening*, which became the text-book of design in Europe for the first half of the eighteenth century, gives four fundamental maxims of the design of the garden: To correct excessive irregular surfaces of the ground; to prolong vistas as far as possible; to avoid showing the whole of the design at once; and to rely on grass and foliage for effect rather than on excessive use of sculpture. The last maxim is one we should always bear in mind when garden-making in this country.

Next in order, I should mention arbours, pergolas, and trellises. The first was introduced in England from some sunny clime, but, owing to the climatic conditions, did not prove much of a success. They are usually constructed of wood with vine or other creeper plant trained over. The pergola came from Italy, a sheltered walk or path named after some grape vine, and also the trellis. All these ought to be used in this country, being parts of the garden which provide for comfort and shade.

Next we have terraces, balustrades, and gate piers. The terrace is one of the most important features of the garden. The width of these is generally governed by the nature of the site. There are rules which govern the width, as you know, but usually the amount of surplus excavated from the foundation of the house decides this point. Still there is more chance of failure by putting a narrow terrace than a broad one.

Balustrades afford much display of design, but I shall simply mention the straight plan balustrade and the curved. The latter is more common in Italy, but there is always the difficulty of working in the parapet; the two sides run on different lines. Balusters are commonly turned, and the spacing varies. In the classical examples they are spaced two-thirds the width, which perhaps may look too heavy. Other examples show intervals six to eight times the width. Pierced stone has been used in place of balusters with good effect, and I think concrete will play an important part if carefully created and designed, and would be less expensive. There are divers ways of treating the balustrade, such as open brickwork, circular tiles, and even chimney pots. But if you cannot afford to do your work decently you had better leave it out altogether. You can be too clever in your economies and defeat your object.

Gate piers is a most interesting subject, and I cannot do better than to refer you to the examples in England, the study of which I am sure you will find most enjoyable.

Canals, cascades, fountains, and waterpieces—although this is perhaps getting out of the architect's sphere—do, I think, come into the designing of a garden, and I do not think a garden complete unless it has water in some form or another. Canals are usually necessary and, when treated properly, most beautiful effects can be obtained. Cascades are most difficult to treat, but do not attempt to be natural, because you will probably be disappointed with the result. Fountains, as far as the architectural part of them is concerned, should be designed by an architect. If figures are introduced, approach your sculptor and see that they are of the best. Waterpieces or ponds are a charming feature of the garden and, like everything else, can be treated in many ways.

Architects and Public Bodies.

Appointments under Seal.

The necessity for architects to make sure that their agreement with public bodies are under seal if their wish to secure payment of professional fees, is again illustrated by the case of *Scott* v. *Irvinestown Rural District Council*, referred to at length by the *Irish Builder and Engineer*, some time ago.

Mr. Scott, Architect, Enniskillen, instituted proceedings against the Irvinestown District Council, and the case was decided against him on the grounds that the contract was not under seal. Thereupon Mr. Scott's legal advisers very ingeniously tried in another way, namely, by testing whether the duty of affixing the common seal to all agreements did not devolve in law, or in equity, upon the District Council, as a public body who could only contract under seal, inasmuch as they would benefit by the absence of seal.

The point is a novel one, but appears to be a reasonable one. Why should the duty of seeing that seal is affixed devolve upon the other party to the agreement, who is an outsider and stands to lose by the omission. It seems a violation of the ancient legal axiom " beware of the seller," in this case the professional man who sells his services.

The Clause of the Act upon which the decision was based, was designed to prevent irregular and improper transactions on the part of local authorities, but says our contemporary, as experience has now shown, it has become an engine of injustice and oppression of outsiders, and it is therefore high time that the law in this respect be amended. Architects and others similarly situated are often not aware of the essential importance of having all appointments or agreements with public bodies made under seal, and occasionally are not in a position to insist upon its being done. They should, however, decline to perform any service until this formality has been complied with.

The Discovery of the Cotswolds.

Mr. A. C. Benson, C.V.O., in the course of a paper on "The Beauty of Age," read before the Society, for the Protection of Ancient Buildings, says, I have lately been spending a fortnight in the Cotswold country, which I first discovered by accident on a bicycle tour thirty years ago. My first find was Burford, that astonishing little town, with its Gothic, Tudor, Jacobean, Renaissance, and Classical houses, all more or less local products, I suppose, but distinguished at every date by an infallible touch of style, and all built out of that creamy orange oolite which cuts so easily and so sharply, and weathers so finely and with such diversity of colour. The interest of that little town is that it shows a strong tendency at every date to try experiments. It is dominated by no traditions. At a later date I found out Broadway and Chipping Campden—the latter being, I believe, the most interesting and beautiful little town in England; I saw Stanway, with its Inigo Jones gatehouse, and many of those fine secluded manor houses, among bare, stone-built hamlets, in the long, cold valleys.

But it is humiliating, in a sense, to think that I was only exemplifying a tendency, and that others were discovering the Cotswolds too. In those days there was just a hint, in a little village mansion or a mullioned cottage gracefully adapted, that artistic people were setting up house there quietly, in panelled stone-floored rooms, and liking the touches of grace and style that met the eye at every turn.

But now the Cotswolds are discovered, as they say, with a vengeance.

A secluded combe, which I found some fifteen years ago, where time seemed to have gone to sleep, has been discovered by a rich man of exuberant taste. An ineffable shabbiness, a sense of disgrace, seems to have fallen on the old cottages by contrast with the "improvements."

But the saddest thing about these beautiful Cotswold villages is the condition of the Churches. It is almost impossible to find an unrestored Church; and it is also nearly impossible to find a Church which has not been restored out of all interest and beauty. It is hardly, perhaps, fair to say that, for the fine Cotswold stone fortunately gets harder from exposure, puts on its rich colour, and the carving is often as sharp and clear as when it was first made. Thus the exteriors have suffered comparatively little; but the interiors have been scraped, cleansed, furbished up, renovated—pews, woodwork, galleries have vanished in favour of neat deal Gothic seats; mean and commonplace reredoses have been inserted; many monuments have been removed, and frightful glass has been inserted.

The worst part of it all is that this sort of restoration has its roots in a perfectly virtuous and active desire to make the Church an efficient institution, and to render it as spick-and-span and clean, as comfortable and bright, as a well-ordered middle-class parlour. Brightness is a word in whose name the worst artistic crimes have been committed. All solemnity and venerable decay and remoteness have to be obliterated in favour of efficiency and smartness. I did, indeed, enter one Church where the hamlet was too poor and the vicar too old to collect money ; and there was every quality present that one would desire. A real tradition, not a fatuous reaction, every century being really represented by an infinite variety of accretion ; and in one place, best of all, I found a practically disused Church, a noble cruciform pile, too far from the village for practical purposes, with all its old surfaces and weather stains, its woodwork leaning at many pleasant angles, its flooring patched and uneven, a real and vital growth, from end to end.

My first and last plea is that we should dare to let things alone, even if we do not understand them or think them beautiful, for the sake of the tender care which set them in their places, just so and not otherwise, and in the name of memory and reverence and love. For taste is a very changeable and inconstant thing, but reverence is eternal. The old house, the old Church, ought to mean something to us, and we must not lightly change and deface them. If we are dealing with old and venerable things, we ought to do as little as we can to them—mending and repairing, but not what is called restoring. For a restored Church is not a new Church, and it is not an old Church—it is a new Church without its originality, and an old Church without its dignity. " God has given you one face," as Shakespeare says, " and you make to yourself another."

And if additions must be made for use and life, let them be frank additions, and not an attempt to fake what is old. I frankly feel that the weakest part of modern art is its attempt to fake antiquity ; and that is a melodramatic sort of art, an attempt to produce illusion—a mere piece of stage-craft, an attempt to import historical colour which is not fairly there.

Papers for Session 1914-15.

The Council invite suggestions for making the Ordinary Meetings more attractive and useful to the members. They will be glad to receive offers of papers or suggestions for subjects for discussion. One proposal that has been made is that the meetings should commence at 7.30 p.m. It may be pointed out to potential readers of papers that there is every facility for the display of lantern slides and diagrams, the papers are printed in advance to facilitate discussion, and every thing possible is done to contribute to the convenience and pleasure of members and visitors attending the meetings.

A Ministry of Arts in London.

Object Lessons from France.

Mr. Wynford Dewhurst in the course of an interesting article in the *Daily Chronicle*, points out that the establishment of a Ministry of Arts in London would tend to co-ordination of the efforts of the various artistic bodies in this country and to efficiency and economy in management.

The French Administration of the Fine Arts is a section of the Ministry of " Public Instruction and Fine Arts," and is constituted as follows :—

President—The Minister of Public Instruction and Fine Arts.
Vice-President—The Under-Secretary of State for Fine Arts.
Three permanent secretaries, one dealing with the teaching of Art, one with national manufactures, and one with the national museum and exhibitions.

There are thirty permanent members of the Superior Council, composed of highly-placed officials in various departments of the service, of Governmental representatives, and of the Préfet of the Seine.

In addition, forty-one others are elected annually, composed of artists, sculptors, architects, musical composers, art critics, Senators, Deputies, a Councillor of State, an Inspector of Libraries, the permanent Secretary of the Academy of Science and so forth.

These seventy-one men, are divided into a score or more committees, each of which deals separately with details of administration, finance, discipline, etc. The work of these committees is systematically and thoroughly inquired into and reported on annually for the benefit of the Chambre des Députés and the Sénat.

Mr. Dewhurst summarizes briefly the vast operations of the Ministry as indicated by the reports as follows :—

1. Upkeep of national palaces, State domains and parks.
2. Upkeep and replenishment of State art galleries.
3. Assisting the various Salons occupying at different periods of the year the palaces of the Champs Elysées, the Tuileries, and the Bois de Boulogne, etc., as well as the salon at Venice.
4. Organization of foreign and provincial exhibitions.
5. Supervision of the working of the State schools of art and their offshoot at Rome.
6. Upkeep of several Parisian theatres and various subsidiary theatrical and musical societies.
7. Management of the Conservatoire of Music and grants-in-aid to various concert societies.
8. Safeguarding historic monuments, castles, cathedrals, and antiquities.
9. Maintenance of a staff of architects, surveyors, and inspectors for the protection of palaces, the repair of existing and the building of new Governmental offices as required.
10. Protection of beauty spots, rights of way, rivers, etc.

11. Maintenance of State manufactures of the " Gobelin " and " Beauvais " tapestries and of Sèvres china.
12. Town-planning and decoration, making of new streets, park, etc.
13. Organization of special missions abroad to study and report on everything pertaining to Art, from the latest method of teaching to the latest " find " in Palestine.
14. Purchase of pictures, statues, etc., from living artists as well as ancient works. Pensions also are granted to widows and orphans of artists in certain cases.
15. Suppression by means of heavy taxation of ugly advertisement hoardings.
16. Organization of ceremonials and decorations on occasions of public rejoicing, or the reception of distinguished visitors.
17. Subsidising the publication of expensive illustrated works on matters of æsthetic interest.

The net cost of these and other activities is £880,000 a year—surely a modest quantum in a budget of a hundred millions, and in view of value received.

Finally, the French Government defray one-third the cost of the building, equipment, and upkeep of all provincial art schools. Henceforth these schools are to be provided with their own museums, and with special rooms devoted to the history of Art. These will be filled with scale models of the world's masterpieces in architecture, monuments, sculpture, etc., and in them demonstrations and lectures will be delivered frequently.

All these object-lessons from France will doubtless be utilized by the coming Ministry of Art at Westminster.

Beaux Arts Atelier.

The Beaux Arts Committee give notice that the work of the Atelier at 16, Wells Mews, Oxford Street, W., is proceeding as usual. The time for executing the June projet has been extended to September 30th.

The new Session commences on September 5th, when the Esquisse for the first Monthly Competition will be held. In order to facilitate arrangements it is asked that Members who wish to make use of the Atelier during the coming Session will notify the Secretary at once.

The Sous-Patron, M. Chaures, is at present serving with the Army of France. During his absence his duties will be undertaken by a competent deputy.

"Ordinary" Meetings.

New Ideas Wanted.

The Society is not alone in seeking some means whereby the Sessional Meetings may be made more attractive. It is probably true to say that the large majority of similar bodies find the greatest difficulty in securing a satisfactory attendance of members at their Ordinary Meetings. In the case of at least one leading professional body, important business has on occasion had to be adjourned for want of a quorum.

Abroad, a similar state of affairs appears to exist, according to *Building* (New South Wales), which says, it was unfortunate that the attendance at the Annual Meeting of the New South Wales Institute of Architects should have again been so discouragingly meagre. An Annual Meeting should claim the attendance of members out of respect for the new President and Executive, if nothing else. That phase of the question was put to one of the absentees, who asked what is there in any of the meetings, annual or otherwise, to attract large attendances ?

Probably that interrogatory sentence crystallizes the reason of all the apathy. Architects have not been " attracted " to the meetings. It may be argued that they should attend as a matter of duty. They should. But they don't. That being so they have to be attracted by the discussion of bright subjects of architectural moment ; by short papers, giving scope for debate on questions exercising the minds of the Executive.

" Let the Council give us something to come along for, and I have no doubt that the great majority will attend," added the absentee. Asked what that something was, he contented himself with saying—" Something lively. Let them get out on new lines. Let us talk about things that will help us in our profession and the Institute as a body."

The President of the New South Wales Institute, Mr. A. W. Anderson, in referring to the matter, very properly points out that it is not one for the Council only, and suggests that those who at present criticize should come along and help by their presence, their advice, and their personal interest.

The difficulty (as Secretaries in particular know), is to get suggestions for remedying this state of affairs. Human nature being what it is, it is very little use appealing to a member's sense of the fitness of things, or to seek support from the point of view of duty to the Society concerned, or courtesy to the lecturer.

Members of architectural bodies particularly in London, with its many other attractions and distractions will not turn up to their meetings in anything like representative numbers, except when their individual personal interests are involved by some crisis in the affairs of the body to which they belong.

Can anyone suggest a practical remedy for this state of things ?

The Society of Architects.

Nominations for Officers and Council, 1914-15.

President:

Monson. E. C. P., F.R.I.B.A., F.S.I., London.

Vice-Presidents:

Sadgrove. Edwin J., F.R.I.B.A., London.

Scott. A. Alban H., M.R.SAN.INST., London.

Past Presidents:

Pridmore. Albert E., F.S.I., London.

Tubbs. Percy B., F.R.I.B.A., London.

Honorary Secretary:

Paine. George H., London.

Honorary Treasurer:

Beaumont. P. M., A.M.INST.C.E., Maldon.

Honorary Librarian:

Harrison. Gilbert A., Oxford.

Council:

Adams. Henry, M.INST.C.E.,	London.
Cancellor. B. D.,	Winchester.
Cooper. Henry A.,	Kettering.
Davies. R. Cecil,	Chester.
Dickens-Lewis. Geo. E.,	Aberystwyth.
Ellis. Herbert O.,	London.
Freyberg. Herbert, F.S.I.,	,,
Gill. Harry,	Nottingham.
Inglis. T. Stewart,	London.
Jack. R. A.	,,
Leslie. Col. F. S., R.E. (Ret.),	Woolwich.
Matthews. Herbert W.,	London.
Moscrop-Young. F. C.,	,,
Partridge. Edward J., F.S.I.,	Richmond.
Pearson. J. Herbert,	London.
Salmon. Chas. E.,	Reigate.
Sheffield. Noel D.,	London.
Taylor. Alfred J.,	Bath.
Tucker. B. R., M.R.SAN.INST.,	London.
Wallis. Thomas,	,,

Additional nominations for Council and Officers may be made by *any three Members* who shall send in their nomination, properly signed, to the Council, *before the first day of October*, and the names of such nominees shall be incorporated with the list proposed by the Council, which shall be arranged alphabetically. The nomination paper must be accompanied by a written undertaking by the nominee to serve if elected, and no such nomination will be valid if the nominee or any of the nominators are under any liability to the Society.

After the first day of October, the Council will prepare a complete balloting list of those nominated for the Council and Officers for the succeeding year, and the elections will be conducted by voting papers.

Note.—A member is not entitled to receive the papers or to vote if he is under any liability to the Society.

Mainly about Members.

A House and Garage has been erected at Solihull, Warwickshire, for Mr. N. C. Alldridge, from the designs of Mr. Burkett J. Emery, of 109, Colmore Row, Birmingham. The general treatment is roughcast, 2¼ in. brindle bricks, with white joints, being used for the facings, and the roofs are covered with old brown, sand-faced tiles. The hall and dining room inglenook are panelled in oak with oak wood-block flooring.

Bolton Urban Council is promoting a second housing scheme, consisting of 310 houses or more at a probable cost of about £70,000. A large plot of land, around which is land so laid out that crowding will not be possible, has been secured, and the Council decided to put the architectural designs out to competition. This was done, and Mr. Chas. Hadfield, of Sheffield, was appointed as assessor and awarded the first prize, with premium of £50 and appointment, to Mr. G. F. Pennington, of Messrs. Garside & Pennington, Pontefract and Castleford. The Council have since confirmed the award.

The New Sunday Schools and Parish Hall in St. James's Road, Marsh, in connection with Holy Trinity Church, have been designed to meet the requirements of the new grading system. On the ground floor are the primary, beginners', and junior departments, and men's Bible class room. The primary department consists of two rooms which can be thrown into one, 60 ft. 6 in. by 24 ft., for use as a gymnasium. The beginners' department is 23 ft. by 20 ft., with two classrooms 16 ft. 6 in. by 10 ft., and the junior department, 34 ft. by 32 ft. 6 in.; a kitchen is also provided on the ground floor. On the first floor are the intermediate department and the senior girls' department. On this floor is a central hall, 57 ft. 6 in. by 36 ft., seating 350 persons, and having a platform at one end. There are ten classrooms, each 12 ft. by 9 ft. 6 in., five on either side of the hall, and divided from the hall and from each other by movable partitions. The cost has been £5,000. The plans have been prepared by Messrs. Joseph Berry and Sons, 3, Market Place, Huddersfield, and the work has been carried out under their supervision.

When The Society of Architects was founded, it was prophesied that some confusion might result in regard to the distinctive initials denoting membership, owing to the fact that art and architecture both begin with A, and that M. S. A., might equally apply to membership in the Society of Arts. As a matter of fact, the two designations have occasionally clashed, but the granting of a Royal Charter to the Society of Arts, did away with that possibility to some extent by making the applicable membership initials of that body, M.R.S.A. We understand that a new by-law has still further widened the breach, and that Membership now denotes Fellowship, and presumably F.R.S.A. replaces any other designation in regard to membership in that Society.

Art and Professionalism.

It is something to be convicted of consistency. The *Journal of The Society of Architects* in its August issue gives us the credit for that, and we can certainly return the compliment. We have nothing but admiration for the consistency and activity of the Society, and we are not sure that we should feel any degree of unhappiness if it were to succeed in dividing the profession into two distinct bodies, one of which would keep its eye mainly on the artistic and the other on the utilitarian side of professional work. Architecture depends for its success on the practical and common-sense application of artistic ideals. We do not admit that architecture can be created merely by the common-sense and careful carrying out of practical problems, nor can we allow that art creeps in by accident. Either one has an instinct which enables one to see things in an artistic way, or one has it not. It is for the practical and the artistic elements to commingle—to work together. They seldom exist to any valuable degree in one individual, but if they do they provide the foundation for a model architect. We say the foundation advisedly, because a really successful professional architect has many other things to think of besides the mere adjustment of practical and artistic considerations. Business capacity, balance of mind, tact, patience, logical deduction, sense of proportion, etc., are all of importance to the making of the ideal architect. It remains to be seen whether we can create a class of professional architects who are fairly up to the standard which the above implies. Is it, then, worth all the trouble we are taking to hall-mark a class of men who are worthy to be called architects? Will any Chartered or Registered class contain a decent proportion of men who fairly fulfil the main conditions for a well-equipped architect?

The difference between the welfare of the art of architecture and that of architects themselves is, we fear, very widely pronounced, and the large number of architects already in practice represent a considerable stake in the game of life. We cannot be surprised if they fight hard for their position. There is not perhaps a very wide difference of quality between the work of Licentiates and that of Fellows and Associates of the Institute, but they are at present written down as of different rank. We are all well aware that there are certain architects whose work is so obviously superior that it might very well command a higher rate of pay than that of the average practitioner. But we are apparently all hard at work to create a Trades Unionism which shall gradually give protection and a name to all who by grace of examination are allowed to practise in the art of architecture. This will give status to many inferior men, and afford a sort of guarantee to the public that they will get the art of architecture from all who are allowed to practise in it. We all know that will be a great delusion. If we wish well to all bearing the name of architect we feel that the art of architecture is after all of greater account, and we cannot for the life of us see eye to eye with those who so ardently work in the cause of Registration. We think none the better of this levelling-down process because it follows so closely the spirit of the age in which we live.—*The British Architect.*

The other day we again put the question whether architecture is an art or a profession. *The Journal of The Society of Architects* says: "We suggest that architecture is an art, and as those who practise it profess themselves to be qualified to do so and call themselves professional men, it is also a profession." In reply to this may we suggest that we should try to practise the art and leave out the professional door-plate altogether?—*The British Architect.*

Special General Meeting.

A Special General Meeting of The Society of Architects will be held at 28, Bedford Square, on Thursday, October 22nd, 1914, at 8 p.m.

Agenda :—

1. Minutes.
2. Scrutineers' Report on the Ballot for Officers and Council, 1914-15.
3. Nominations and Announcements.
4. Presentation of Students' Prizes.

Meetings and other Fixtures, 1914.

Date.		Time.	Occasion.
Sept.	30th.	6 p.m.	Last day for depositing Architectural Scholarship Drawings.
Oct.	1st.	4 ,,	Council Meeting to receive Nominations for House List.
,,	22nd.	4 ,,	Committees, Council, and Special General Meeting.
,,	,,	8 ,,	Members' Meeting. Presentation of Students' Prizes. End of Session.
,,	31st.	6 ,,	Last day for depositing Quarterly Competition Drawings.

THE
Journal
OF
The Society of Architects
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Including Transactions and Architectural Notes.

No. 84. Vol. VII. OCTOBER, 1914. [New Series.

The Society is not, as a body, responsible for the opinions expressed by individual authors and speakers.

Members and War Service.

It is probable that every eligible member has joined the Army or Navy, and that those who are prevented or disqualified from so doing are recruiting or doing other useful service. Two of the President's sons have enlisted as privates rather than wait for commissions. Major R. Cecil Davies is the R.E. Division Officer at Chester, and Major Chadwick, Captain C. Harold Heathcote, Captain Inglis and Mr. J. Haslam are with their regiments. Mr. H. Freyberg, who has two sons with the Fleet, is Adjutant of a Battalion of the National Reserve, and Mr. A. E. Pridmore, Past President, is a Special Constable. Mr. W. H. May, Mr. F. J. Bowhill and Mr. J. W. Lowe are with the R.N.V.R. Mr. S. J. Marshall is in the Yeomanry, and Mr. F. Clark is in the R.A.M.C. (3rd Lowland Division). The only eligible member of the Society's clerical staff has enlisted. The Secretary has a son in the Transport Section of the London Scottish, now with the British Expeditionary Force. These are only a few instances to hand at the moment, and are mentioned with a view of securing material for a more complete record of members on War Service of various kinds.

The work of the Benevolent Sub-Committee of the Architects' War Committee is being conducted from the Society's offices, and special attention is being directed to the Society's proposal for the prevention of unemployment amongst architects by the creation of work. The attention of members is invited to the particulars given on another page.

The Architect and War Service.

Appeal to the Architectural Profession.

The Royal Institute of British Architects feeling it to be their duty in this national emergency to arrange for such collective action by the Architectural profession as may be found to be desirable have, with the co-operation of members of other Architectural bodies, formed an Architects' War Committee which is broadly representative of the whole profession in the United Kingdom.

It is felt that a contribution by the whole body of Architects to the Prince of Wales's Relief Fund will not only secure a larger donation and enable all to help, however small a sum they are able to subscribe, but that the donation given in this way may encourage others to a like effort.

The Committee will be glad to receive contributions to this Fund.

While, however, it is most important that the National Fund should be supported, the Committee cannot be blind to the fact that there is likely to be a great deal of temporary distress among Architects.

The Board of Trade returns for the month of August show the immense diminution of trade already caused by the War, which cannot fail to have a serious effect on the work of our profession. The funds at the disposal of the Architects' Benevolent Society are quite inadequate to cope with such an emergency. The War Committee therefore hope that all Architects who are in a position to do so will give the most generous support to the Special Fund intended mainly for the assistance of Architects and for other matters arising from the War which may affect our profession.

Donations on the enclosed form should be sent to The Hon. Secretary, The Architects' War Committee, 9, Conduit Street, Regent Street, W.

How Members of the Society May Help.

The President of the Society, Mr. Percy B. Tubbs, F.R.I.B.A., in a letter to the Members draws attention to the support which the Society has given to the Architects' War Committee in granting a sum of one hundred guineas as the nucleus of a fund for providing paid work for architects whose means of livelihood is stopped by the War.

The Society's proposal has been accepted in principle and left to the Benevolent Sub-Committee to carry through. The work of this Sub-Committee is to be carried on at the offices of the Society, which have together with the services of the clerical staff been placed at the disposal of the Architects' War Committee.

The Architects' War Committee have issued the foregoing two circulars, and the Council of the Society desire to draw the attention of Members to the particular necessity of supporting the Architects' Special War Relief Fund. They hope that by the generosity of Members and their friends it may be possible to augment very largely the Society's contribution, as a very considerable sum of money will be required if the Society's proposals are to be carried into practical effect.

It is not proposed to publish the names or amounts given by individual members, and therefore everyone will feel at liberty to give according to his means, as the value of the sum subscribed will lie not so much in the amount received, as in the number of members who respond and the celerity with which they take their part.

It is suggested that members who agree to their contributions in bulk being remitted through the Society should send them to the Hon. Secretary of the Benevolent Sub-Committee, at 28, Bedford Square, London, W.C. Remittances should be made payable to the Architects' War Committee.

WAR SERVICE.

For the convenience of members of the architectural and kindred professions and their friends who wish to respond at once to Lord Kitchener's appeal, the following arrangements with the various authorities have been made by the Architectural Association.

LORD KITCHENER'S ARMY.

Men enlisting at Whitehall in any branch of His Majesty's Regular Forces, through the Architectural Association, will be sent to whichever regiment they may choose, provided it is not recruited to its full strength, and they will be kept together as far as their duties will allow.

The President (Mr. Maurice Webb), and a number of members have already been accepted for the Royal Engineers, where as Sappers they will find their civil training gives them a great advantage. Those who prefer to join the Cavalry, Artillery, or Infantry, can do so.

The term of enlistment is for the War, and the age limit is 19 to 35. Pay at the usual army rates.

A Special branch of the Motor Transport Corps is now being formed to collect and repair the numerous cars attached to the Allied Forces in the field. A limited number of recruits are required immediately.

Every man applying must be a mechanic, skilled in motor repairs, and he should state whether he can bring his own car or motor-cycle.

Pay for the lowest rating will be 3/3 a day. As the Corps is expected to leave England shortly recruiting must be rapid, and men wishing to join, who have the necessary qualifications, should communicate with me at once.

Work in the profession is likely to become scarcer as the War continues, and to economize employment is most desirable. Assistants and others eligible for Kitchener's Army should not hesitate to join at once, leaving their berths to those who from age or health cannot be accepted, and who may otherwise be out of work.

TERRITORIALS.

The Foreign Service battalion of " The Artists " is at full strength, but a few picked men are being enrolled as a reserve, and they will be trained in the 2nd battalion until vacancies occur. A second battalion of "The Artists" is being formed for Home Defence.

Men of the 2nd battalion will live at home at present. Term of enlistment, four years. Pay 1/- a day, and 2/- a day allowance until barracks are provided. The Territorial Engineers are not at present recruiting for Home Defence.

THE ARCHITECTURAL ASSOCIATION VOLUNTEER TRAINING CORPS.

The A.A. Volunteer Training Corps, as originally proposed by Mr. Maurice Webb, is now being formed in connection with the Central Volunteer Training Corps Committee, of which Lord Desborough is Chairman. This Committee has received permission from the War Office to encourage and create Training Centres throughout the Kingdom for men who are ineligible for Lord Kitchener's Army or the Territorials, or who are prevented by special circumstances from joining the Forces.

The A.A. Corps, of which the Rifle Club will form the nucleus, is open to Architects, Surveyors, and members of kindred professions ; the only qualification being that they are prevented from joining the Army as at present constituted. The Headquarters of the Corps will be the Central Electric Supply Co.'s Station, Lodge Road, St. John's Wood, where there is ample accommodation for miniature rifle practice, revolver practice, drill and skirmishing. Members can drill any day of the week except Sundays, and obtain musketry practice likewise, except on Tuesdays and Thursdays. There is an Entrance Fee of 5/-, and a subscription of 2/- a month, but this latter is liable to be increased if the price of ammunition advances. Rifles and revolvers of service weight are provided for musketry practice at the ranges, with an allowance of 21 rounds of ammunition per day free of charge, and members will be able to purchase further supplies at the range if required. The general equipment of the Corps will depend on private effort to a great extent, but assistance will also be obtained from the Central Volunteer Training Corps Committee.

Those applying should state clearly why they are unable to join the army, and when enrolled they will be furnished with a Special Pass, to admit them at Headquarters.

All communications regarding the A.A. War Service Scheme should be addressed to Mr. Alan Potter, Hon. Secretary, A.A. War Service Bureau, 18, Tufton Street, Westminister, S.W.

PROFESSIONAL CLASSES WAR RELIEF COUNCIL.

Although it is understood that most of the Professional Institutions have Benevolent Funds and are fully capable of dealing with distress amongst their members in normal times, it is realized that abnormal conditions are likely to arise in consequence of the war. Moreover, whilst the function of the Benevolent Fund are, as a rule, limited to rendering financial assistance, it is clear that in the circumstances certain forms of assistance other than monetary will be both advisable and necessary.

Societies which have been organized for relief may find considerable difficulty in dealing with the new problem of distress among the professional classes and those dependent upon them. With a view to co-ordination of effort and to enable the Professional Institutions to co-operate with the Societies organizing relief, it is proposed to form an organization, a description of the constitution and functions of which are set out below. It is not proposed to trench on any existing Benevolent Funds nor to interfere in any way with the work of the Societies organizing relief, but it is confidently believed that a Central Committee such as is suggested will prove useful. If the distress is wide-spread it will be necessary to deal with the family as a unit, and the co-operation of business men and business women cannot fail to be mutually beneficial.

The following Committee appointed at a meeting held at the Westminister Palace Hotel, on the 3rd September, 1914, provisionally to formulate a proposal and to approach the Professional Institutions with a view to securing their co-operation, have outlined a scheme, which they recommend to the attention of the Councils of these Institutions.

Provisional Committee: H. CHATFIELD CLARKE, LEONARD DARWIN, M. G. FAWCETT, NORAH E. GREEN, ANTHONY G. LYSTER, C. STANLEY PEACH, CHARLES L. SAMSON, SIR JOHN SNELL, SAMUEL WEST, JOHN T. WOOLLEY, EDGAR WORTHINGTON.
Honorary Secretaries: SYBIL GOTTO, THEODORE G. CHAMBERS, ALEXANDER GODDARD.
Kingsway House, Kingsway, W.C., September 8th, 1914.

It is proposed to form a Central Council for the co-operation of the Professional Institutions and the Societies organizing Relief of Distress for the purpose of rendering assistance and advice to members of the professional classes adversely affected by the War.

By the inclusion in the Council of representatives of the Societies organizing relief, the Professional Institutions hope to be able to avail themselves of the assistance of such societies in discovering and relieving distress in the professional classes; and these Societies will have the benefit of the advice and experience of the Professional Institutions. The principal functions of the Council will be advisory and consultative. The Council is not formed with the idea of interfering in any way with the Benevolent Funds of the Professional Institutions or with the Societies organizing relief, but by securing the co-operation of these bodies, the Council may provide certain centralized forms of assistance, such as temporary employment, hospitality, education, maternity aid, etc.

The Council will supervize the expenditure of any special funds that may be raised or entrusted to them to deal with such forms of relief.

The Council will watch public events, and where necessary approach the Government, the Local Authorities, or other bodies in the interests of the members of the professional classes.

On the invitation of the Committee, the Council of The Society of Architects will be represented on the War Relief Council, and have nominated the President, Mr. Percy B. Tubbs, F.R.I.B.A., to act on their behalf.

The Special Fire Service Force.

The primary object of the Special Fire Service Force, organized by The British Fire Prevention Committee, is (inter alia) to undertake the fire service, fire patrol and fire survey duties for Government arsenals, depots, stores and other official establishments, and to render similar service in respect to such public works and institutions as may be considered of national importance. Where possible temporary assistance may also be given in the public interest to port authorities and other corporations who apply for aid through the proper channels.

War conditions involve special fire risks, notably incendiarism. There is a greater tendency to negligence resulting in fires, and the likelihood of unsuitable premises being used for storage. In certain localities the possible effect of bombardment and aerial bombs requires consideration.

To prevent unnecessary outbreaks of fire and to limit their area structurally, fire surveys may be required. To guard against the risks of negligence and incendiarism, and to meet incipient fires promptly, fire patrols may be required. To meet actual outbreaks of fire in public establishments or localities not sufficiently provided with a trained fire brigade, strong fire brigade assistance may be temporarily required.

For fire survey work, fire survey parties comprising one fire surveyor, two assistant fire surveyors and one surveyor orderly-clerk have been formed, available for occasional surveys at 24 hours' notice (gratuitous survey service).

For fire patrol work, fire patrol squads comprising one inspector, one foreman and four patrol men have been formed, available for part time service (12 hour patrols) at 24 hours' notice (at a moderate honorarium where required).

For fire brigade work, fire service sections have been formed comprising one fire section chief, one superintendent, two inspectors, two foremen, three firemen-engineers (artificers), three firemen-signallers (station work), nine firemen, one fireman orderly, and four firemen drivers, available either for full time service at 48 hours' notice (principal officers gratuitous service ; inspectors, foremen and firemen paid).

The terms of service are either full time, part time, or occasional, and either gratuitous (with out-of-pocket expenses or allowances), or subject to pay per scale (with travelling and postage expenses). Having regard to the national emergency and the duty of all who can assist to render aid, the Fire Surveyors, Patrol Officers and most of the Fire Brigade officers over the rank of Inspector have offered gratuitous service, and similarly several other applicants.

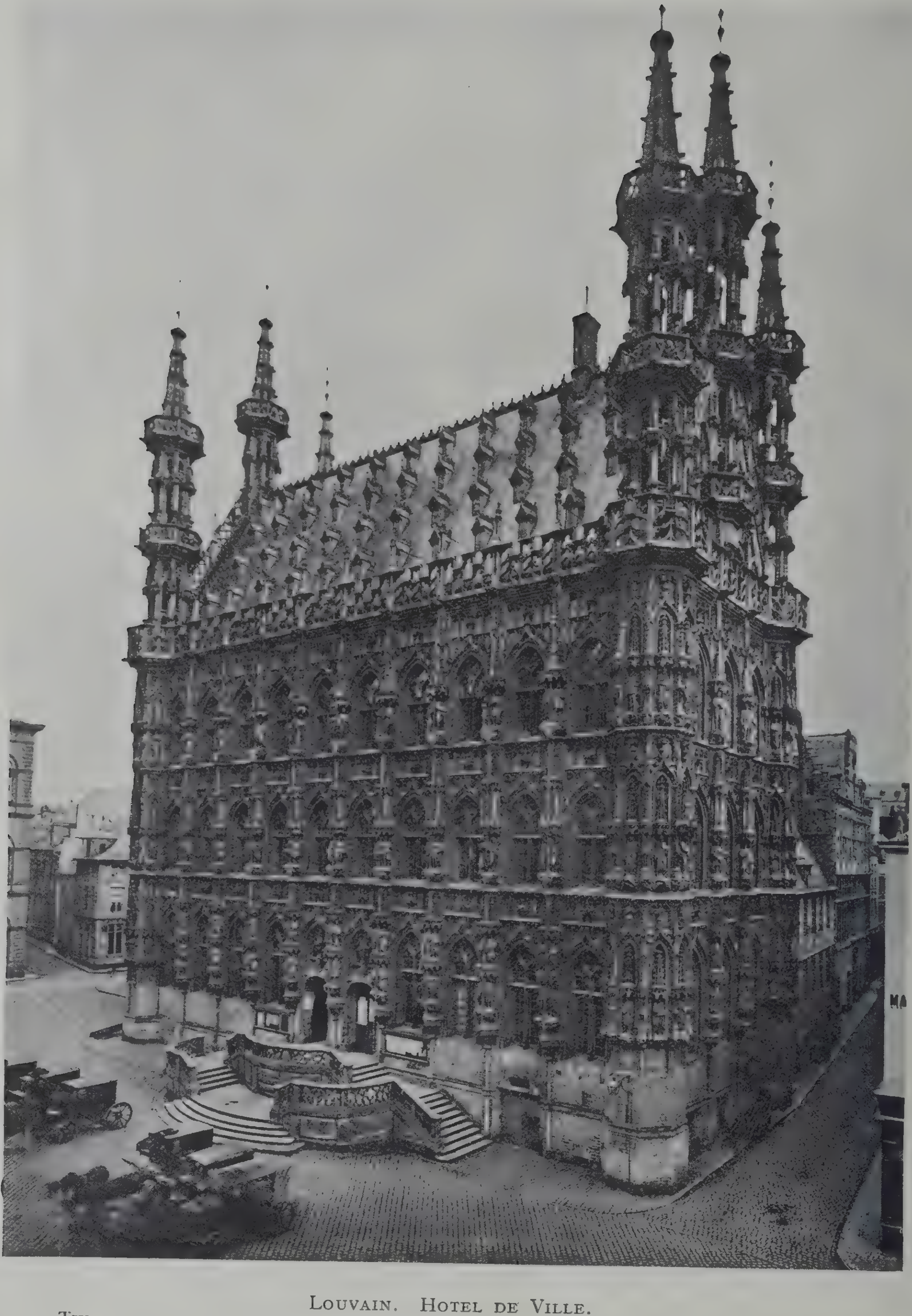
For the fire survey parties entrusted with occasional surveys only professional men—*i.e.*, architects, surveyors, insurance officers, etc., of high standing, with professional assistants of considerable experience, are accepted. For the fire patrols, surveyors, architects, engineers and their assistants are accepted for certain duties, and private firemen of good standing for others.

At an early stage in the organization the co-operation of certain architectural and fire brigade corporations was invited. The Architectural Association is co-operating, which is a matter of congratulation, as just the right type of professional men will thus become more closely interested in fire protection.

The Headquarters of the Force is the Offices of the British Fire Prevention Committee, 8, Waterloo Place, Pall Mall, London, S.W., where further information may be obtained.

Holiday Competition Abandoned.

Messrs. Whiteside and Caslake inform us that owing to the War the competition referred to on page 398 of the *Journal* (August) has been withdrawn, and all competitors notified by them so far as they know.



Louvain. Hotel de Ville.
The town was destroyed by the Germans on August 25th, 1914, and the only Public Building remaining is the above.

Belgium before and during the War.

A Retrospect and a Comparison.

Twenty-three years ago, or to be more precise, on August 15th, 1891, the peaceful invasion of Belgium by a party of members of The Society of Architects took place, covering much of the ground now historic as the scene of many battles between Germany and the Allied Forces.

It may be of interest at the present time to briefly summarize the account of the visit as embodied in a paper read by the organizer, Mr. G. A. T. Middleton, A.R.I.B.A., then the Secretary of the Society, at a meeting on November 24th, 1891, and to reproduce photographs of some of the buildings then visited and which have been partially, if not totally, destroyed by the Germans.

The passage of Mr. Middleton's party from Dover to Ostend was accomplished in the greatest comfort, although, as the boat was somewhat late, the detachment, which numbered forty-one, was hard pressed to prepare in good time for the reception by the then King of the Belgians (Leopold II.), which he had most graciously commanded should take place at his Palace at Ostend.

The Members were received with the greatest cordiality by His Majesty, who accepted an Illuminated Address prepared by one of the Members, and personally replied to it, at considerable length. It should be stated that the party was headed by the then President, Mr. W. Howard Seth Smith, whose severance from the Society in later years, on the question of policy in regard to the examinations, is still deplored.

From Ostend the party proceeded to Bruges, where the week-end was spent and places of architectural interest visited under the direction of M. Sancerie, the City Architect. Ghent was the next place to be reached, where M. Van Assche, the Architect for the restoration of the Cathedral, met the party and acted as guide. The members then proceeded to Antwerp, destined twenty-three years later almost to the day, to become the temporary headquarters of the Belgian Government, transferred from Brussels. It may be of interest to mention here that Mr. Alfred Portielje, Secretaire de la Societe Royale des Architectes d'Anvers is one of no doubt several Belgian architects, who being disqualified for bearing arms, have sought refuge in England during the war. To resume, M. De Winter, the head of the third Bureau of the Municipality, took charge of the visitors and was assisted by M. Baekelmens, who was then engaged in the restoration of the Cathedral. On the next day, Malines was reached. The Rev. Canon Von Caster, acting as the representative of the Archbishop, met the party and conducted them over the great Cathedral, which on August 28th, 1914, suffered considerable damage during the bombardment of the town by the Germans.

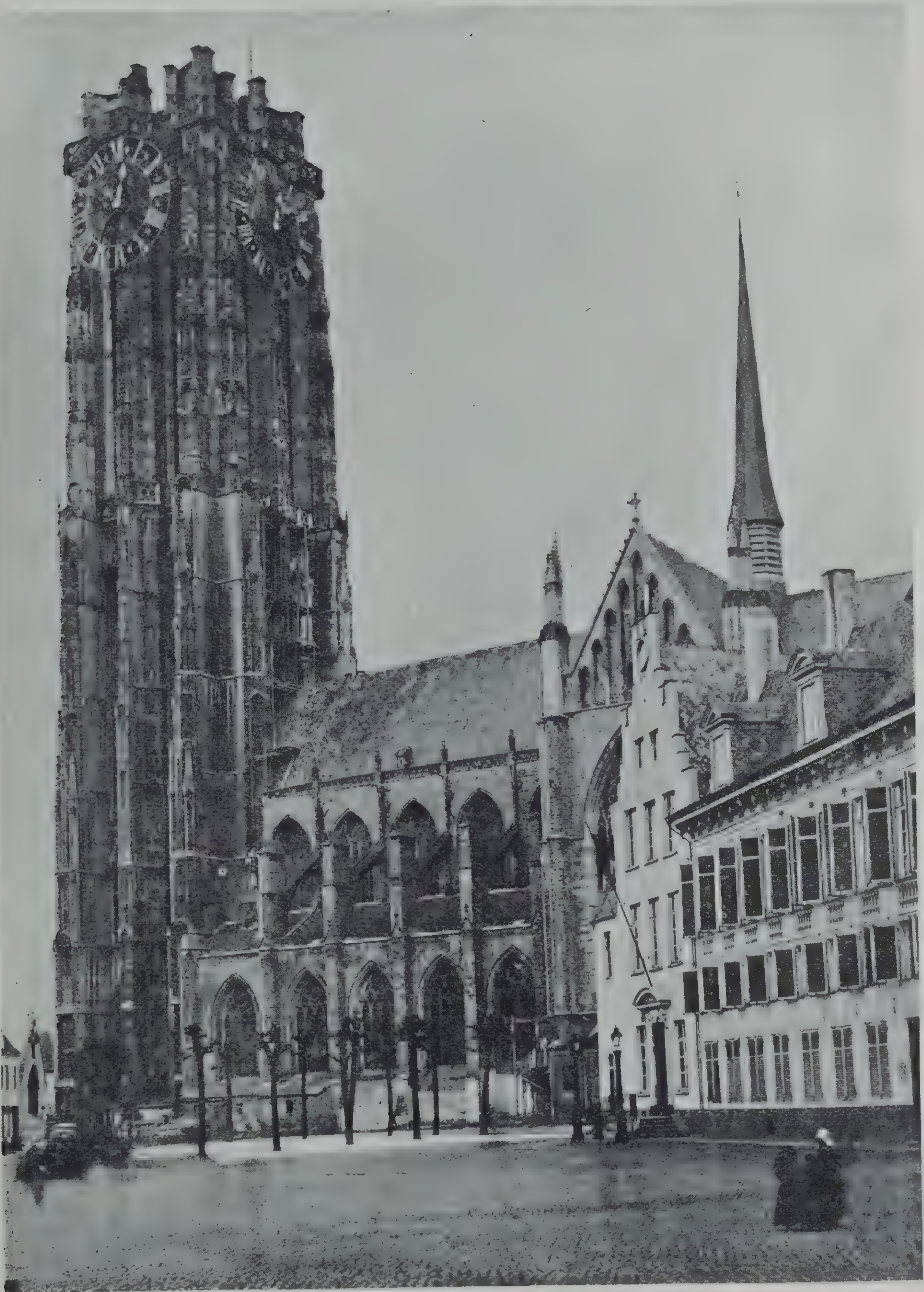
The Times correspondent says that three shells only—perhaps four—actually pierced the structure itself. Two of these passed through the fabric of the nave, one of them wrecking one of the fine Gothic arches and multilating the famous carved pulpit. Happily all the stately pillars of the Cathedral escaped. A third shell (and perhaps a fourth, but it is difficult to be sure from the ground) passed through the spire, but apparently not so as to cause any structural weakness. The injuries to the fabric, both in spire and nave, can, he thinks, be repaired without much difficulty.

What is most sad is the almost complete destruction of all the stained glass windows. Some of them, though not of great age, were of great beauty. The immense and admirable south window is entirely gone. None of the glass is left and not much of the tracery. The north window has suffered not much less. All the other windows—and they were many and priceless—are shattered, so that, whatever it may be possible to recover from the wreckage which now strews the floor below, they are for the moment non-existent ; mere empty frames with barely enough fragments of glass left to indicate the character of the designs. It is altogether pitiable.

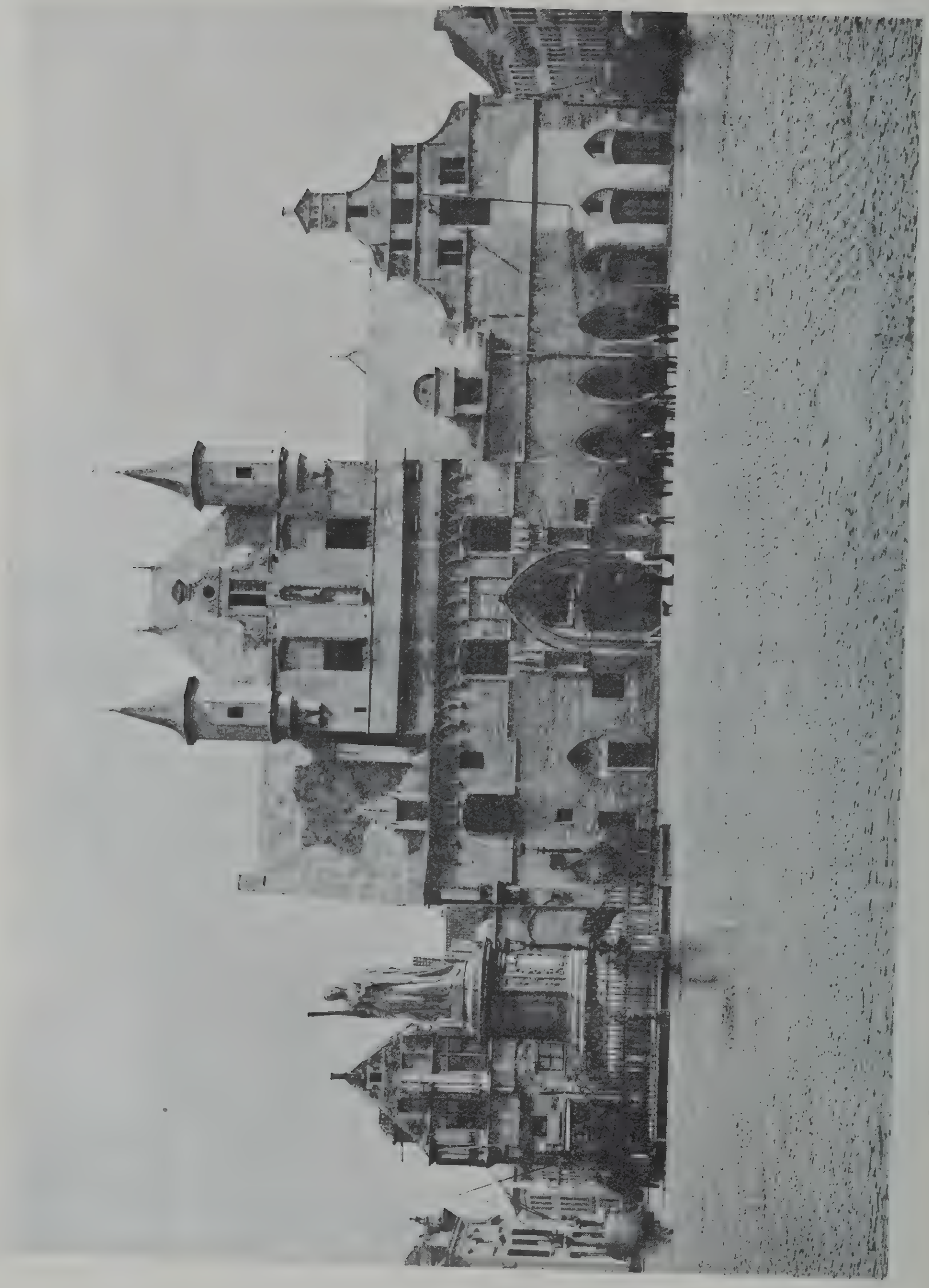
The paintings in the Cathedral, including the famous Van Dyck altar piece, are safe. The most precious were hurriedly removed to a place of safety, as has also been done in the case of Antwerp and other Cathedrals.

Brussels was reached on the evening of August 20th, the very day, on which twenty-three years later, it was temporarily abandoned by the Belgians and occupied by the Germans. The next day Louvain was reached and it is recorded that the party were able to see the unexpected spectacle of the military funeral of an Ex-Prime Minister. Louvain is now the spectacle of a very different kind of Military display, having been practically destroyed by the Germans. The Hotel de Ville, a photograph of which we reproduce, is the only public building still standing. The party subsequently returned to Brussels where an informal meeting of the Members of the Society present was held after Dinner in the Hotel. The Visitors and the Ladies were excluded, but whether from the dinner or from the meeting or from both, is not quite clear. It is evident, however, that matters of domestic interest to the Society were discussed, which afterwards bore useful fruit. The City Architect, M. Janaer, and the Archivist, M. Wauters, interested themselves in conducting the party over Brussels and special facilities were afforded them for inspecting the King's Palace, and the buildings at Laecken.

At the end of the week about half the party returned home ; the rest continued the journey on to Mons (now made famous by the splendid stand of the British Expeditionary Force against greatly superior numbers of the Germans). Here there was a reception at the Hotel de Ville, by the Burgomaster. The members then travelled on to Tournai (the place where a peaceful pageant and tournay, to have



MALINES. THE CHURCH OF ST. ROMBAUT.
THE TOWN WAS BOMBARDED BY THE GERMANS ON AUGUST 28TH, 1914, WHEN CONSIDERABLE DAMAGE WAS DONE TO THE CHURCH AND TOWER.



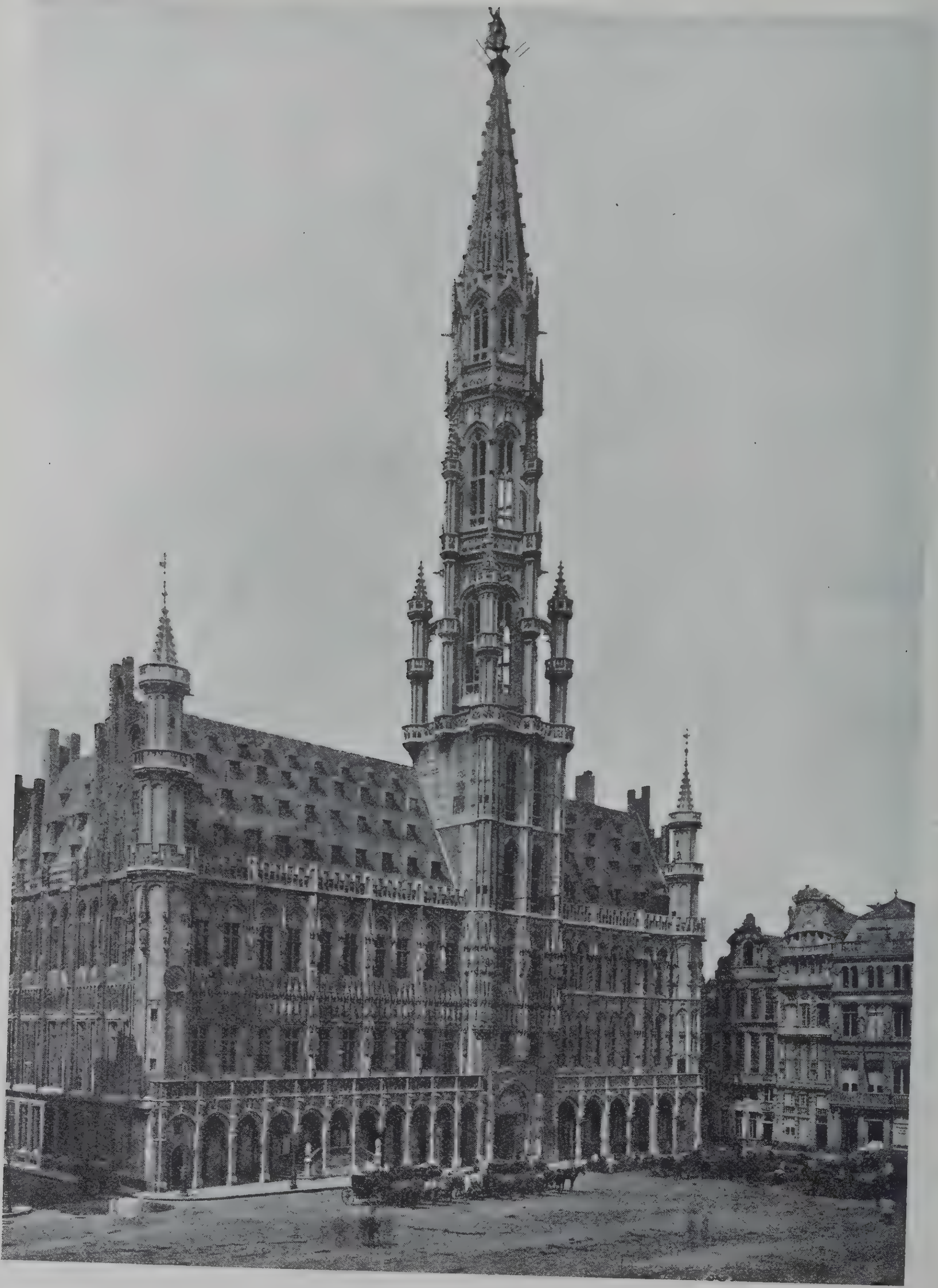
Malines. The Market Place and La Halle and the statue of Marguerite de Parme.

been held this summer (was replaced by a fierce battle), and so to Courtrai and Oudenarde, the latter a little town possessing the finest Hotel de Ville in Belgium. The excursion was brought to a close by a visit to Ypres, where the Burgomaster conducted the members over the great Cloth Hall and other interesting buildings, the party afterwards returning home via Ostend.

Who could have anticipated that in future years many architects, including possibly some of the next generation of the Society's party, would exchange the T-square for the rifle and fight side by side with their confreres of Belgium and France, in driving back the vandals who have played such havoc with the architecture of those countries in endeavouring to hack their way through to Paris. May we not hope that before very long the wish expressed in the Society's address to King Leopold, may be realized and that " The Architects of Belgium and of England may be brought " into closer and more friendly relations with each other for their mutual benefit, " and that the buildings of each country may become better known to the Architects " of the other, with a view to the erection in both countries of works of greater " beauty. This and other objects bearing upon the development of Architecture, " The Society of Architects was formed to promote, and its members will continue " to support and forward them at all times to the best of their ability."

Six years later, a party of members spent Easter in Flanders, with the object of doing a week's sketching. Bruges is an ideal town both for artist and architect, and most of its domestic work is executed in brickwork, some of it of most elaborate character, and all of it of the greatest interest. The iron ties which are everywhere introduced are often elaborately wrought, and are an effective feature in the elevations. The town contains many specimens of municipal and ecclesiastical architecture, the chief among these are the Hotel de Ville, La Chapelle du Saint Sang, the Palace de Justice, and the Cathedral.

The account of the tour in the Society's *Journal* of October, 1897, states that the central dominating feature of the town is the belfry tower, in the Grand Palace, whose use as a signal tower, to herald the approach of the enemy, has in these degenerate days of telegraph and telephone, long out-lived its usefulness. Probably it has now a new lease of life in being used for its original purpose. We reproduce some views of Bruges, and also of Ypres, which was the next stage. It is recorded that the party heard High Mass on the Easter Sunday, in the Church of St. Martin, formerly a cathedral. The tower was built in 1433, under the direction of an architect named Martin Untenhove of Malines, but like the famous tower in that city it is minus its spire.



Brussels. The Hotel de Ville.
The seat of the Municipality. The town was occupied by the Germans on August 20th, 1914.

Courtrai, recently the scene of severe fighting between Germany and the Allied Forces, was next visited, but the town being en féte the party were glad to get back as soon as possible to Ypres, from whence they travelled to Oudenarde.

The Flamboyant Town Hall is probably the finest for its size in Belgium. The reproductions of the illustration of the Imperial Crown on the summit of the tower, taken by a member of the party, will be of particular interest. The elaborate chimney piece, dating from 1529, has the arms of the town and of Austria emblazoned upon it.

The general impression of the members of the party seemed to be that these old Flemish towns were fast asleep, and that time was standing still with them. The chief occupation of the gendarme on duty at the Grande Place consisted in keeping the small boys from meddling with the domestic water supply. The gendarmes have now something else to do, and these beautiful cities have had a rude awakening at the hands of the invaders. When one thinks of the present condition of such cities as Louvain and Malines, and the wholesale destruction of architectural gems in these and other districts, one cannot adequately express the feelings which are aroused by such wanton and unnecessary violence.

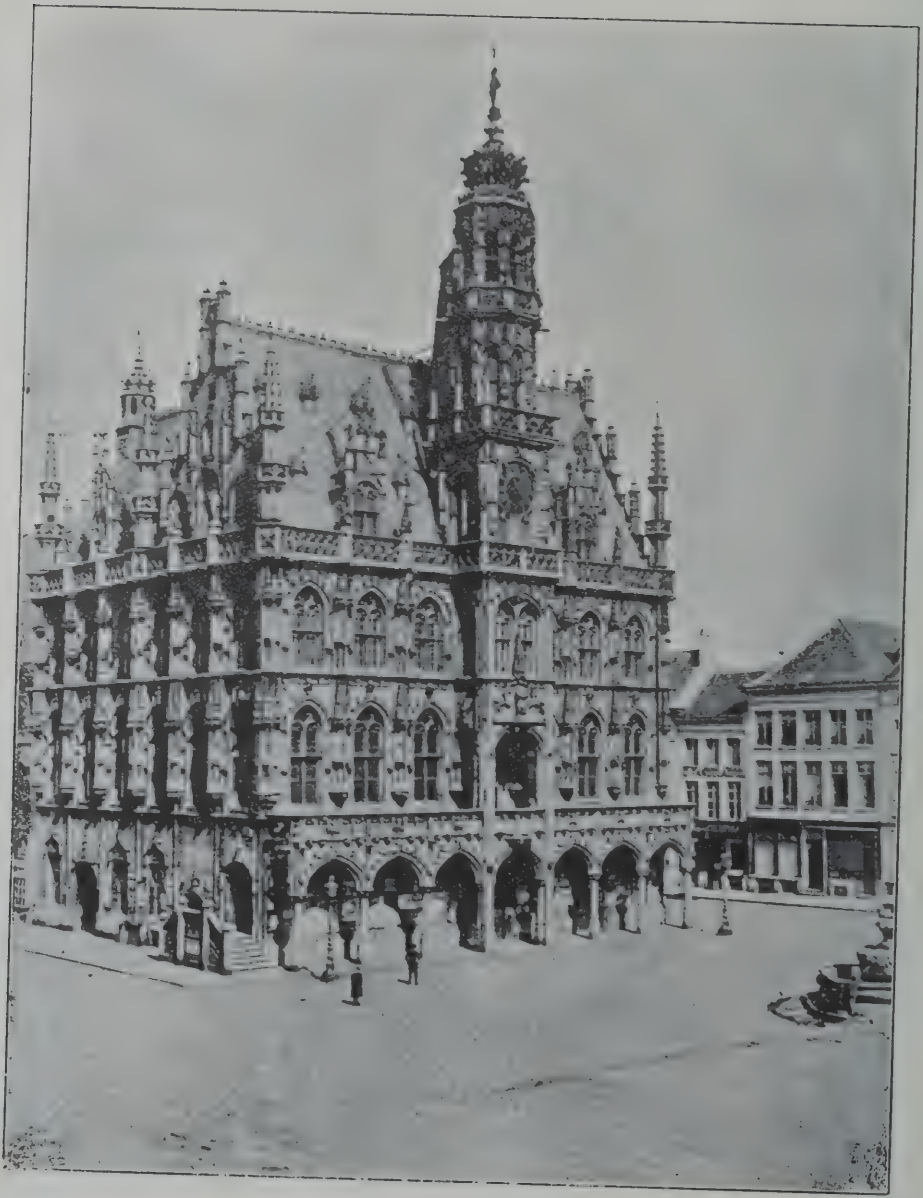
In the *Journal* for August, 1901, is an article on Laon, by Mr. Middleton, in which he expresses the following views :—

Though one of the smaller, Laon is certainly one of the more picturesque towns in Northern France, while it contains more that is of interest to the architect and antiquarian than many a larger place. Situated upon a crescent-shaped hill with steep sides and overlooking a broad valley on one side and an open plain on the other, its eligibility from a defensive point of view must have been obvious in pre-gunpowder days. It was possible on such a site to build a town which would be practically impregnable, and such a town was built and prospered. Strategically, the position is still important and the modern fortifications are not entirely contemptible, but such things are no longer necessary to the prosperity of a city, and Laon has become an old-fashioned country town, so far as the presence of an electric railway, electric light and telephone will allow, and possessed of a beauty not to be found in spick and span new houses and large shop fronts.

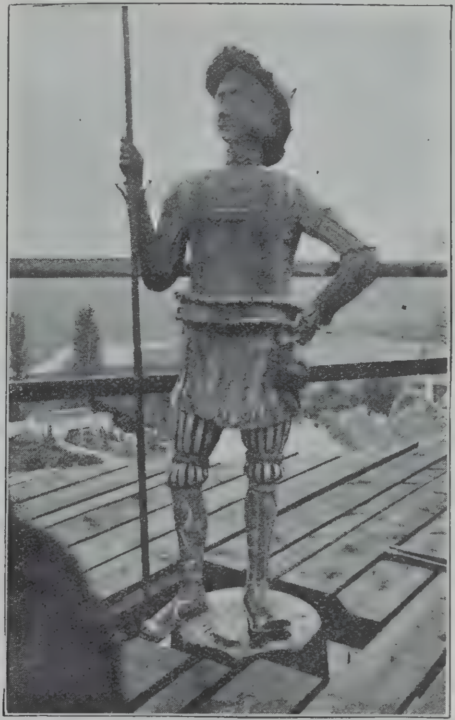
Laon has lived to contradict the suggestion that its fortifications are no longer necessary. It may be hoped that they are sufficient to protect the city which is in the direct route of the German Army at the moment.

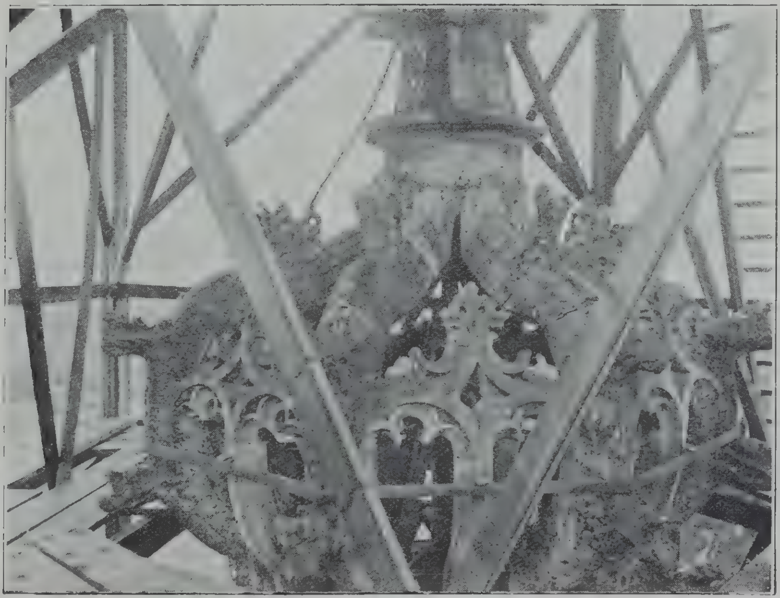
REIMS CATHEDRAL.

Sir Thos. G. Jackson, R.A., in a letter to *The Times* says, this time last year, in lovely weather like the present, I wandered about North-Eastern France to enjoy the architectural beauties of Amiens, Beauvais, Senlis, Noyon, St. Quentin, and



Hotel de Ville, Oudenarde.





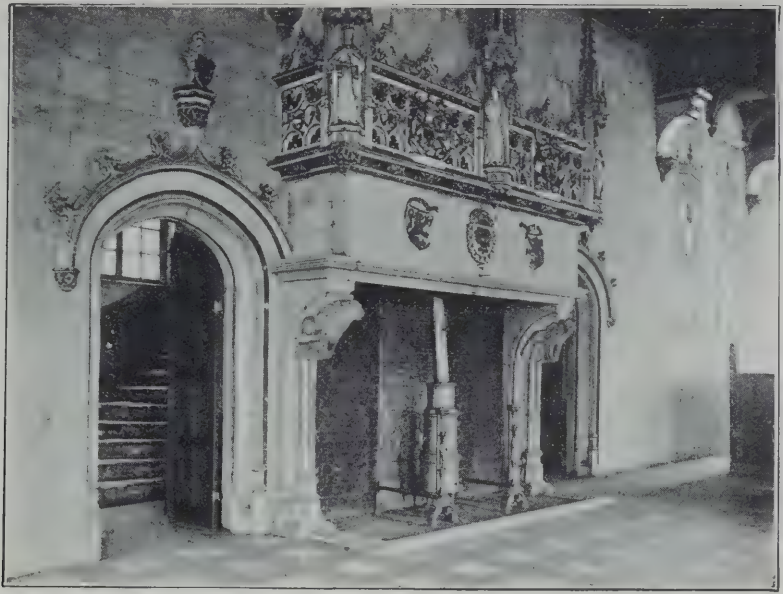
Imperial Crown and Bronze Figure. Hotel de Ville, Oudenarde.

Reims, the district in which French Gothic found itself and grew to maturity. It is hard to realize the change that has come over those peaceful scenes, and the ruin that has befallen those treasures of art. Amiens and Beauvais seem to have escaped German savagery, which has battered the famous church and steeple of Senlis, damaged the Cathedral of Soissons, and laid that of Reims, the greatest of them all, in ruins.

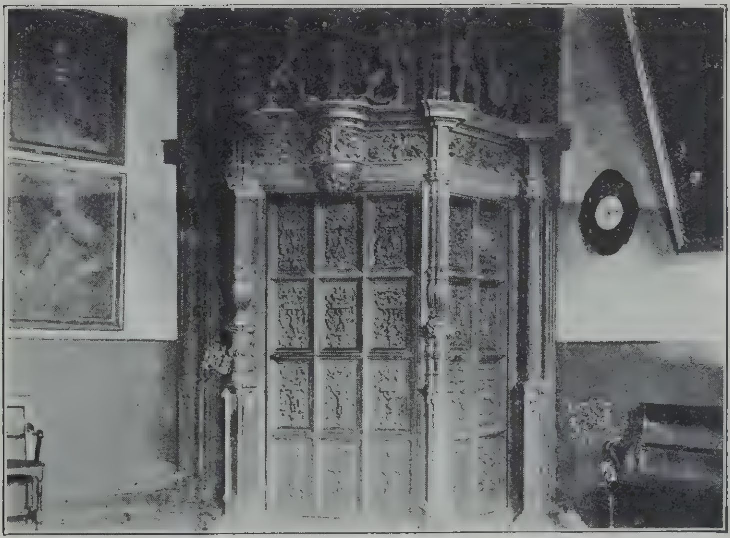
The loss so art by the destruction of Reims can hardly be conceived. In it French Gothic reached its climax. It had advanced a step beyond Chartres, which has about it still something tentative, and it stopped short of the incipient weakness of Amiens. It was the very crown and flower of French Gothic. The apse and chapels of Jean d'Orbais set the pattern for all that followed, and have never been surpassed. "This is how we must do the work at Cambrai," wrote Wilars de Honecort against the sketches he made of them while the walls were rising. The sculptures were unrivalled even by those at Chartres, and were finer than anything at Amiens. The groups of the Annunciation and Salutation in the west portal were comparable to the antique, with an added spirituality wanting in ancient art. The clerestory was filled with glorious glass of the 13th century, like that at Chartres, Bourges, and Canterbury. All, or nearly all, this we must have lost irreparably. The glass must have been blown out by explosions, and the lovely statuary must be shattered and defaced. How much of the main walls and the great arcades, with their beautiful capitals, or the storied west front with its wealth of imagery both inside and outside, is capable of repair and preservation we shall hope to know before long. I fear there will be little enough.

We are told there was no military reason for this outrage. The Cathedral was in fact serving as a hospital for German soldiers, who barely escaped destruction by the shells of their own side. Its ruin was simply an act of brutal savagery to gut the rage of an invader disappointed of the conquest of which he had made sure. And where is it to stop ? Noyon, with a great Cathedral scarcely less important to art, is not safe ; Laon, with its stately nave and its five steeples, is at the enemy's mercy ; St. Quentin, with its fine church and its delightful Hotel de Ville, lies in the path of his retreat and may share the fate of Louvain.

At all events let us know the names of the commanders to whom these atrocious outrages are directly attributable, that they may be handed down to infamy. But we know well enough from whom they have learned their lesson. This artistic ruin lies at their master's door. The Kaiser himself has aspired to be considered an artist like Nero. May we not hope that like Nero he may be brought to say, "Qualis artifex pereo" ?

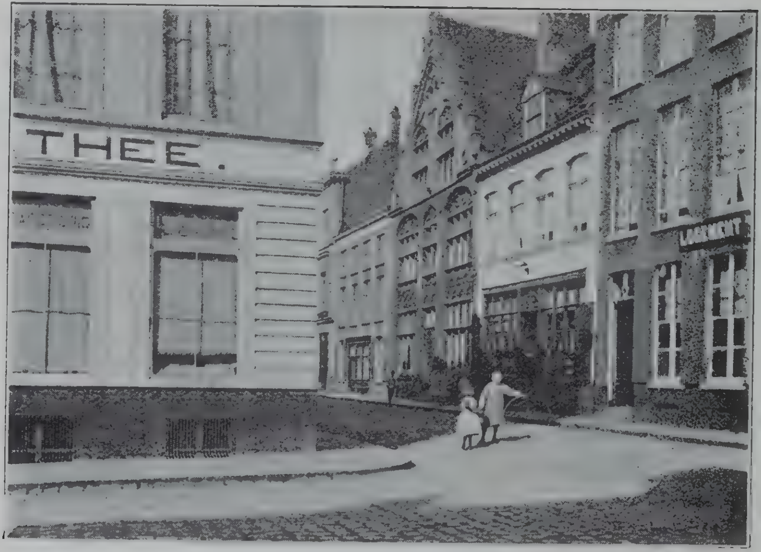


Chimney Piece.

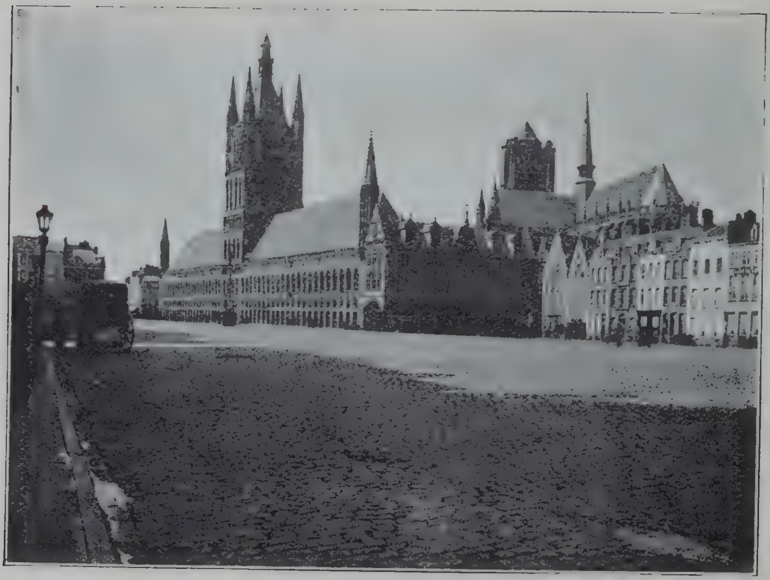


Oak Lobby.

The Hotel de Ville, Oudenarde.

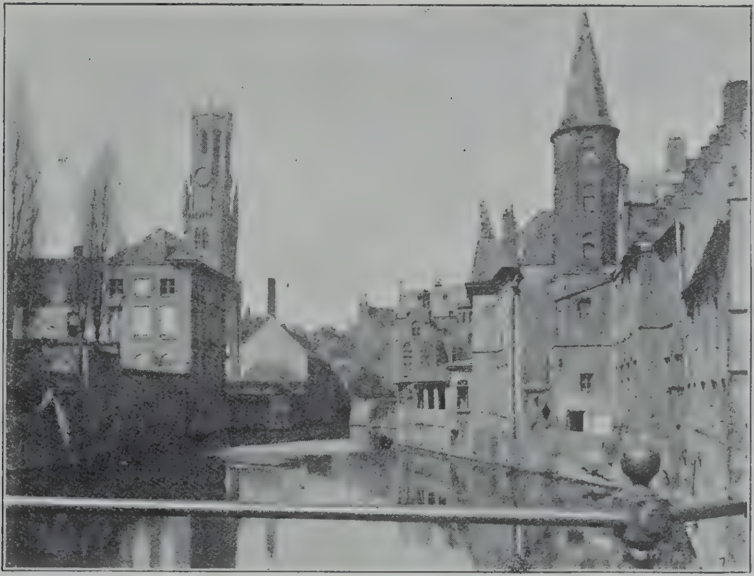


MAISON BILBUYCK.

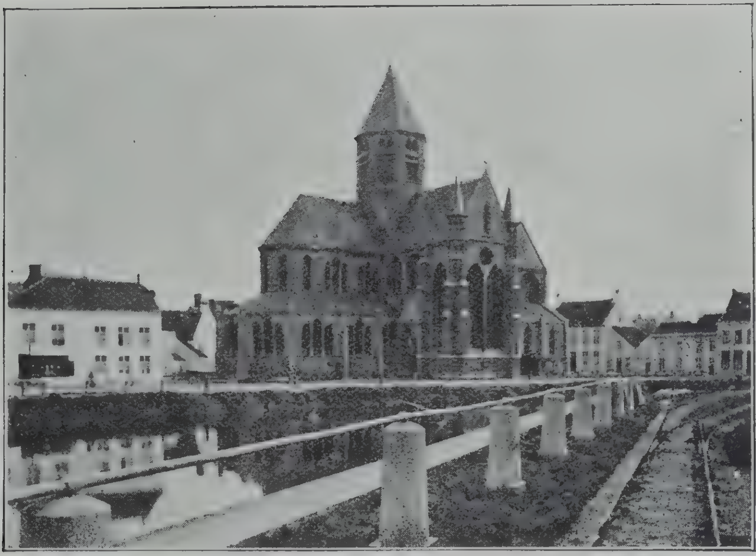


GRANDE PLACE.

SOME VIEWS OF YPRES.



Canal Scene, Bruges.



Notre Dame de Panièle, Oudenarde.

The Architect in Relation to the Fine Arts.*

WHEN the architect erects a building with decoration and fittings of an artistic character, not only in the elevation of the exterior, but also in the hall, staircase, and rooms and their furnishing, thus introducing works of Fine Art, he ought to call upon the best and highest representatives of Fine Arts—painters, sculptors, and decorative artists. But how rare, how quite exceptional, is it that he does this! Occasionally the building owner who employs him, if he be a lover of the Fine Arts himself, may of his own accord give such an order to one of the leading representatives of pure art. As a rule, however, even in the case of our most costly buildings, the owner leaves it to the architect, and the architect to the contractor, and the contractor to some firm of superior stonemasons or decorative painters, who, on their part, again employ a class of superior artisans, at best with some decorative artist to guide them; but hardly ever is the leading sculptor or painter of the day called in. Examine the exterior of the most costly and sumptuous buildings, palaces, and churches, and great public offices, on which huge sums have been expended, and tell me in how many cases the sculptures in the pediments, the figures placed in the niches, or the friezes in relief, are the work of the leading sculptor of the day. And when you come to the interior, how many instances can you enumerate in which the pictorial decoration of the walls, or the sculptured decoration of the interior, has been executed by the recognized master in painting or in sculpture?

On the other hand, let me remind you that some of the works which we treasure most as representing the highest degree of perfection in sculpture, that have come down to us from the ancient Greeks, were not works of pure sculpture—that is, statues standing by themselves and meant only to be seen in themselves,—but were works of architectural sculpture meant to decorate a building. The most striking example of this, constituting one of our greatest (perhaps the greatest) national treasures, are the Elgin marbles in the British Museum, the statues which decorated the pediments, the high reliefs in the metopes, and the low relief of that marvellous frieze that for over 522 ft. ran round the Parthenon. If not executed in detail by Pheidias himself, we are all agreed that their composition and design were the work of this greatest master of the art of sculpture. The ancient authors definitely state that the sculptor Praxias, the pupil of Alcamenes, composed the pedimental groups and the metopes for the great temple of Apollo at Delphi. But to Alcamenes himself and to another sculptor, Paeonius of Mende, are attributed by Pausanias the pediments of the great Temple of Zeus at Olympia, which have in great part been excavated for us by the German archæologists about forty years ago. There has come down to us a long and full inscription mentioning the names of the various sculptors who were employed in decorating the famous Erectheum on the Acropolis at Athens, and even the prices paid to them for each portion of their work are there recorded.

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* From the Cantor Lecture No. 2, given by Sir Charles Waldstein, Litt.D., Ph.D., before the Royal Society of Arts.

A generation after this we hear that the sculptor Collotes, who assisted Pheidias in the erection of the glorious gold and ivory statue of Zeus at Olympia, produced a great work of art in the wonderful gold and ivory table that was erected before the statue in that temple. Then in the middle of the fourth century B.C., the leading sculptor, Scopas, produced the pediments of the Temple of Athena Alea, at Tegea, of which some most interesting fragments have come down to us. We even hear that he himself furnished one of the great columns of the temple of Artemis at Ephesus, which was decorated by sculpture in relief, specimens of which have come down to us from the British excavations by Mr. Wood, and are a part of the treasure in our British Museum. We may almost hope that one of the most beautiful of these, if not the actual one assigned to Scopas, certainly reflects his spirit and style. The sculptor of exquisite grace and beauty, Praxiteles, produced in this very temple of Artemis at Ephesus an altar decorated with reliefs which was a masterpiece of his art. The famous Mausoleum of Halicarnassus, one of the seven wonders of the world, the remains of which are again one of our great national treasures in the British Museum, and which we owe to the excavations of the late Sir Charles Newton, was profusely decorated with statues in the round and relief work in the friezes, and we are definitely told that the leading sculptors of the day—Scopas, Bryaxis, Timotheus, and Leochares—divided the various sides of the work among them.

I could give you an endless sequence of such great works representing the pure art of sculpture at its height, in which the opportunity was given to the sculptor, through the architect, to manifest his art in the buildings of old. So, too, all the great painters of antiquity, whose works are recorded in terms of the highest admiration, from Polygnotos, with his famous Lesche of the Cnidians at Delphi and his Stoa Poikile at Athens onward, produced some of their most famous paintings as interior and exterior decorations of public buildings.

The same applies to the Gothic period whenever we can note and pick out a definite sculptor whose work can be identified in the present day. But when we come to the Renaissance in Italy, I would merely have you recall what Florence will tell you if you pass through its streets, its churches, and its museums. From the Baptistery Gates by Niccolo Pisano and Ghiberti, the great sculptors decorated with their best work the exterior and the interior of churches and palaces. Take Donatello's work in the one church, Or San-Michele, his St. Mark, his St. George (now in the Bargello National Museum), and a bas-relief of St. George slaying the dragon. It was he who made the organ gallery or Cantorie for the Duomo, and now in the "Opera del Duomo," with the famous singing boys and girls by Luca della Robbia. The chapel of the Pazzi, built by Brunelleschi, contains a frieze of Angel Heads by

Donatello and Desiderio, while the inside contains the Apostles and Evangelists by Luca della Robbia; on the silver altar for the Baptistery was the statue of the Baptist by Michelozzo. Not only the churches but the palaces and private dwellings were decorated in the same way. Donatello made the classic medallions in the court of the Palazzo Riccardi. There are hardly any of the great buildings of Florence the exterior and interior decoration of which does not contain some masterpiece of sculpture by one of the most eminent sculptors of the day. And when we come to the frescoes or wall-paintings of the interior of these buildings, we have the Stanze by Raphael in the Vatican at Rome, and the elaborate and minute decoration of the Loggie of that same palace by the same great master, to that marvellous repository of the highest painting in one room, the Sistine Chapel, which contains the most perfect work ever executed by Michel Angelo, by Ghirlandaio, Botticelli, Luca Signorelli, Rosselli, Perugino, and Pinturicchio. In every church and palace in Italy we have specimens of painting at its best as organically interwoven with the building, and thus forming part of the artistic design of the architect. The same applies to the more decorative adjuncts and furnishing, in which the great sculptors like Benvenuto Cellini and Verocchio realized, even in minute objects and accessories of use and furnishing, the supreme qualities of their art as pure sculptors. The same applies throughout the period of the Renaissance in France, through the periods of Louis XIV., XV., and XVI., in which the domain of the architect and decorator directly furnished a sphere of work and the opportunities of realizing their highest art to the sculptor and the painter as well. Let me remind you that even in Germany some of the best work of that great sculptor, Schlüter, is to be found in the corbel heads decorating the architecture of the old arsenal at Berlin. I need but ask you to turn to the walls of this beautiful lecture-theatre in which I have the honour of addressing you, and to examine the wall-paintings by that remarkable artist Barry, unequal in excellence, but some of high merit, to make you realize what was attempted in England under the inspiration of the brothers Adam in the eighteenth century.

Now, for a contrast, turn to the most costly buildings erected in our own day. Who composes and executes the pediments and friezes; who places in the niches, decorated with statues on the exterior or in the interior of churches and public buildings, the statues that embellish them? Who even composes the design for what ought to be a most perfect statue in the niche of a reredos, or on the choir-stalls and organ-loft, whether they be of marble, bronze, or wood? I can at this moment recall one exception, unfortunately still incomplete, in which Mr. Gilbert has thus been able to place some of his most exquisite work in the church at Sandringham. Some sepulchral memorials and fountains by the late Mr. St. Gaudens in America are also a consoling exception. But for the most part the execution of such splendid opportunities for the production of great works of pure art in sculpture and in painting is left practically to the building contractor with the consent of the architect, and the sum available for such important artistic work is cut down to a minimum. The same applies to pictorial decoration, and, as I have said before, to furnishing and detailed ornamentation. I have already cited the Boston Library as a notable exception. Whether we are admirers of that period of pictorial art in England or not, the frescoes in the passage to the House of Lords, perhaps illustrative of a not very high standard of painting in England, still marked a step in the right direction as regards the encouragement of art in this country. The same applies to Sir William Richmond's opportunity as regards the mosaics of St. Paul's Cathedral and several other noteworthy exceptions.

The fact, however, remains that, where large sums are expended in buildings, public or private, and where there is an artistic necessity, or even an opportunity, of their decoration by works of pure sculpture or pure painting, a proportionate amount ought to be set aside to attain the highest class of such artistic work, and the architect ought to insist on such co-operation with his most representative colleagues in the world of art. To say the least, in view of the limitations which I have imposed upon myself in dealing with art here to-day—*i.e.*, in its commercial or industrial aspect—such action on the part of architects and the public would relieve the impedition of art which prevails at this moment, and would furnish a stimulus and a wide field of opportunity to the best artists of our day.

I have, on another occasion,* insisted upon the duty of the State and other public bodies to employ our best sculptors in the production of out-of-door monuments as memorials to our great men in every sphere. I then endeavoured to show the artistic as well as the social, political, and moral desirability of such encouragement, existing to a high degree in other countries, such as France, but in a languishing state as regards our own. In passing, allow me again here to counteract one abuse of a minor character in this connection, which, however, is significant of the general attitude as regards art. I am sure many of you have been disappointed and irritated, as I have been on many occasions, when vainly seeking for the name of a sculptor on some public monument. Long and conspicuous inscriptions, not so much devoted to the history of the man to whom the monument was erected, but giving the names of all the members of the public body which at the time erected it, stare one in the face ; on a bronze we may have the name of the bronze foundry displayed in some prominence at the base of the bronze itself ; but the name of the sculptor is frequently hidden away in such a manner as hardly to be discernible even by the searching eye. This small fact may be indicative of the general attitude of the public and the public bodies towards the representatives of highest art and towards art itself.

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* In a lecture delivered before the Royal Institute of Great Britain.

The Lighting of Sculpture, Architecture and Painting.

An article in the *Ohio Architect* on the Science of Lighting, by Mr. W. S. Lloyd, introduces the opinion of Mr. Luckiesh, the Lighting Expert of the National Electric Lamp Association of Cleveland, on the above subject. He approaches it from the point of view of the artist rather than that of the illuminating engineer.

Lighting Works of Art.

"Sculpture," says Mr. Luckiesh, "has been defined as modelling or shaping art whose function it is to express and arouse emotion by imitation of natural objects and principally the human body in solid form, reproducing either true proportions in three dimensions, or their proportions in two dimensions of length and breadth only with a diminished proportion in the third dimension of depth or thickness.

"Solid modelling and real light and shade are special means which the sculptor alone among the imitative artists enjoys. Single outlines are the means which the sculptor enjoys in common with painter, and when we consider work executed in very low relief it is evident that the principle of such work is not the principle of sculpture at all. Its effect does not depend on qualities of surface light and shadow, but rather on qualities of contour as traced by a shadow on the side away from the light source and a line of light next to it. Bas-relief approaches the graphic art or painting—the third dimension is very short of its true proportion.

"In truly three-dimensional sculpture lights and shadows within the boundary lines are quite essential. This means there must be directed light on this class of art production. The directed light may come from a small or large source, depending on the effect desired. Likewise the direction is of importance. Let us take this head, said he, pointing to the father in the Laocoon group. In this case the expression should be one of intense pain or terror, most readily shown by bold, sharp shadows from point sources properly placed."

Mr. Luckiesh proceeded to show that when the lights were flashed on the cast from above, and this is the light one generally gets upon the original in the Vatican and upon the plaster reproductions in most of the art museums, the observer is compelled to look upward at the group against the light which comes in from above. The expression thus seen is far from expressing the pain and terror expected. Extinguish these high lights and turn the light on from beneath, reversing the shadows, and the effect is startling. Even with alternate side illumination the change in the expression is more than would be expected.

Lights and Shadows.

"One of the high authorities, Flaxman"; Mr. Luckiesh went on to say, "tells us concerning the quantity of light and shadow in a group that if the light be one-third and the shadow two-thirds the effect will be bold. If the light be one-fifth and the shadow four-fifths it will be still bolder and accord with the tragic or terrific action ; but the more general effect of sculpture is two-thirds of the light on the middle of the group, with a small proportion of very dark shadow in the deep hollows.

" It is already evident that a preponderance of highly diffused light is undesirable in sculpture. However, a certain amount of diffused light combined with a preponderance of directed light is necessary in attaining the most desirable illumination and with the head lighted as in the last figure, only three or four per cent. of the total light need be directed on the dark side towards the dark side to greatly enhance the value of the result.

LIGHTING AND ARCHITECTURE.

" The direction and quantitative distribution of light also affects the appearance of architectural designs. A moulding or capital will change wonderfully in appearance when the position of the light is varied, and diffused light to obliterate detail is obviated by the application of a final tinted coating, which remains more thickly in the deeper recesses, thus simulating shadow.

" The function of architecture is to express and arouse emotion by combinations of ordered and decorated mass. Here the direction of the incident light is of less importance than in purely sculptural art, although it is safe to abstain from the use of too much diffusion of the light. The use of a tinted surface-coat will also in this case tend to mitigate the evil of too much diffusion of the incident light. The appearance of a moulding, when lighted from various directions, is also striking.

PAINTING.

" Purely conventional decorative painting is not affected by the direction of the incident light, but the quality of colour-value of the light is of importance. Under most artificial illuminants the colours simply shift further toward red than when illuminated by daylight. That is, a deep yellow would appear as orange, a bluish purple would change to a reddish purple, and a blue would appear black, while a red would appear brighter. These shifts are not usually dangerous, but it should be remembered that colours have no definite or fixed existence of their own, once they are out of the tube, because they are so influenced by their surroundings and so affected by the quality of the light which illuminates them. In this class of decoration apparent variations in light and shade have been produced by augmenting certain colours by directing a certain amount of properly coloured light upon them. It is evident that enriched coloured effects likewise can be thus obtained.

MURAL PAINTING.

" Mural painting is an adjunct to architecture, and, as such, it is the applied art of painting, in the highest sense of the term. It becomes of interest to the illuminating engineer because it is peculiarly dependent upon its surroundings. The mural painter must not only consider the form and position of the space which the painting will occupy, but he has not availed himself of all the possibilities if he fails to consider the colour of the surrounding walls and the quantity, quality, and direction of the light which it will receive. But suppose the mural painter has recognized all these things and has completed his work. To what avail are his plans if the illuminating engineer enters later, remodels the system of lighting according to empirical rules, paying attention to watts divided by arears instead of direction and quality of light ? That is one place where empiricism will not succeed, unless by accident.

" In the easel picture the art of painting reaches its highest development. Here direction, quantity, and quality of light play very important parts in the final expression of the work. It is true that paintings are well illuminated with difficulty. Much diffused light eliminates the undesirable results of glare, due to specular reflection.

" But there is another side worthy of consideration. Experiments indicate that each picture is most satisfactorily illuminated by a direction and quality of light specially adapted to it. Perhaps the artist has produced his work in diffused daylight incident from above. He has chosen his values of light and shade, likewise his colours, and is satisfied with the completed picture. But perhaps the purchaser has other ideas. It is very evident from these experiments that a painting can be made to various expressions by varying the direction and quality of the light.

" Art museums," Mr. Luckiesh concluded, " are usually badly lighted, since there is one general light for pictures painted under various light conditions, all different from that under which they are finally viewed. Each picture should have its own specially treated light, in order that, as nearly as possible, it may be seen under the daylight conditions of its original production. The lighting artist is able to create these conditions. He is also able to supplement for the painter the limitations imposed upon the latter by his pigments, while the benefit he is able to confer upon the owners of dimmed old canvases, transformable into luminous masterpieces, is incalculable."

The Value of Examinations.

We recommend the budding architect to study " an architect's letter to a student," in the *Builder*, of August 28th. The writer of it, who apparently entered the Institute by the back door, gives the usual excuses for failing to submit himself to the test which he now recommends others to undergo. He admits that success in examinations does not necessarily make an architect, bring him a client, give him a better standing in the public eye, or secure him the monopoly of a good reputation and practice. The latter may equally be attained by the unexamined.

He appeals to the sporting instinct of the student (so lacking in himself), to take the fence instead of looking for the gate, but the arguments he uses in this direction appear to us to be singularly lacking in conviction.

The advantage of an examination conducted on proper lines is that it forces the student to educate himself gradually for his profession, and does not necessitate cramming merely with a view of passing the test, in other words, it is a means and not an end.

An examination is not necessarily a test of qualification. There are people who while they could not successfully tackle a given problem under pressure and within a stated time, could solve it without much difficulty if it occurred in the course of their practice. Again, an architect of mature years can point to his work as a standing proof of his qualifications in a way which is practically impossible to do in any other profession.

Architectural examinations at present are chiefly a means of entering the body which holds them. They are not essential, however desirable, as a means of entering the profession. The writer of the article referred to gives the chief reason for the falling off of candidates for the final of the R.I.B.A., and the shirking of other architectural examinations, when he admits that as soon as he got his first small commission and became busy, he considered himself too important to bother about examinations. Why ? Because he knew that at that time he could enter the Institute without them, and that in any case he could practice without that qualification.

So long as these examinations are voluntary and restricted in their scope, so long will they be evaded ; but make them essential to the practice of architecture and give them statutory value, and it will not be necessary to appeal to the sporting instinct of architectural students in order to get them to fulfil what will then be an obligation, if they wish seriously to pursue their profession.

How to Attract an Audience.

In our last issue (page 436 ante), we drew attention to the need for some new ideas in the direction of rendering the meetings of architectural bodies more attractive to their members.

Referring to the subject in a leading article, the *Architects' and Builders' Journal*, says, there was once a familiar heading in the newspapers—"How to Brighten Cricket": that, presumably, being a matter of very grave import. We now notice an architectural application of it. The Society of Architects, in the September issue of its *Journal*, seeks to discover some means whereby sessional meetings may be made more attractive, and asks for some practical suggestions to this end. Apparently the cue has been given by a New South Wales journal, which deplores the meagre attendance of members at the annual meetings of the N.S.W. Institute of Architects. One of the absentees was button-holed on the subject, and his answer was, "What is there in any of the meetings, annual or otherwise, to attract large attendances?" It may be argued that architects should attend the meetings of their societies as a matter of duty, but the fact is that they do not, and, that being so, says The Society of Architects' *Journal*, they should be attracted by "the discussion of bright subjects of architectural moment; by short papers giving scope for debate on questions exercising the minds of the Executive." The absentee had added: "Let the Council give us something to come along for, something lively, and on new lines. Let us talk about things that will help us in our profession, and the Institute as a body." We have doubts about a policy of discussing "bright subjects of architectural moment"—this has rather the smack of social endeavour or popular pleading; but we feel a great deal of sympathy with that absentee. Speaking from our own experience, we must say that the meagre attendance which characterizes the meetings of most architectural societies in this country is due entirely to the dull subjects which are discussed and the general dull manner in which papers are delivered. We have always contended that far too many papers of an archæological character are included in the syllabuses. This means traversing the same familiar ground in the familiar way. More than once we have taken up this matter in connection with presidential addresses. What we want is individual expressions of opinion, forceful comment, good delivery, and as high a level of literary attainment as possible. If we recall, for instance, a paper like Mr. Billerey's on "Modern French Architecture," or Professor Lethaby's "Some Things to be Done," and compare these with the stock kind of paper which seems to be expected as the proper thing, it will be recognized how much justice there is in the absentee's comment. Our advice to all the societies is to pay special attention to topics of architectural moment, and particularly to those of practical worth. When a paper like "The Planning of

Modern Hospitals " is read at the Institute, the meeting is crowded, but when the topic is " Colour in Architecture " or " Some Fragments of Scandinavian Buildings " it is not surprising that the members prefer to keep away, rather than be hopelessly bored for a couple of hours.

From correspondence we have received, and letters on the subject published by our contemporary, it would seem that in the opinion of those who have so far expressed their views, the remedy lies in making the meetings less formal and holding them either in the afternoon or earlier in the evening than is usually the case so as to permit of the members getting home at a reasonable hour.

Undoubtedly one deterrent is the fact that the paper to be read usually appears immediately afterwards in the columns of the professional journals, and subsequently in the transactions of the Society concerned, so that unless a member is keenly interested in the subject he usually contents himself with reading the paper at his leisure. This is a privilege which is more especially intended for the convenience of country members, who have fewer opportunities than others of attending the meetings.

Meetings and other Fixtures, 1914.

Date.	Time.	Occasion.
Oct. 1st.	4 p.m.	Council Meeting to receive Nominations for House List.
,, 6th to 10th.		Membership Examinations.
,, 22nd.	4 p.m.	Committees, and Council Meeting.
,, ,,	7.30 ,,	Special General Meeting. Scrutineers' Report on the Ballot for Officers and Council, 1914–15. Lantern Lecture by Mr. G. A. T. Middleton, A.R.I.B.A., on "Some Belgian Towns Affected by the War."
,, 31st.	6 ,,	Last day for depositing Students' Quarterly Competition Drawings.

Town Planning.

Procedure of Local Authorities.

The Garden Cities and Town Planning Association, of 3, Grays Inn Place, W.C., have issued in pamphlet form at the price of one penny, a most useful pamphlet, by Mr. Edmund R. Abbott, Clerk of the Urban District Council of Ruislip-Northwood, setting out in a small compass the procedure to be followed by local authorities in promoting town planning schemes.

It is found that in some cases officials do not read the whole of the Act or the Regulations, but when they get the points summarized there is some inducement for them to go further into the matter.

Some of the chief points to be observed may be roughly epitomized as follows :—

The first step is to determine the area of the proposed scheme, and having given the necessary notices to other authorities and owners of land within the area, to apply to the Local Government Board for permission to prepare a scheme.

Various maps have then to be prepared and deposited, and an opportunity for a conference of landowners given.

A further map must then be prepared as evidence of bona fides on the part of the Local Authority, to be followed by the most important step of the passing of a resolution applying to the Local Government Board for permission to prepare a scheme. This practically give the Local Authority control of the development of the area.

Then follows the Local Government Board enquiry, which if granted, necessitates the preparation of a draft scheme and a further map showing the proposals in detail. The co-operation of landowners at this stage is essential, as it is they who develop the land and not the Local Authority.

When the draft scheme is settled by the Local Authority for submission to the Local Government Board, it must be sealed as must also the map, and no further alterations can be made to it by the Local Authority.

The scheme is then considered by the Local Government Board, and after possibly a further local inquiry and the making of any required modifications, a draft order of approval is issued and placed on deposit. Interested parties may within one month raise objections to the Board's proposed modifications, and when these have been settled, and the scheme finally approved by the Board, owners have a further opportunity of objecting within twenty-one days.

If any such objections are made, the Order of approval must be laid upon the Table of both Houses of Parliament for thirty days, while they are in Session, or for forty-five days if the scheme suspends any Public Act of Parliament.

If an address to the King is presented by either House during those periods against the proposals, the matter comes to an end, but without prejudice to the making of a new scheme. If no such address is presented the scheme is approved by the Local Government Board and comes into force.

This short summary necessarily omits much important detail in relation to essential points of procedure, but enough has been said to show that the full information which is obtainable at so moderate a price should be in the hands of all interested in the subject.

The Society of Architects

Graduates' and Students' Competitions, 1914-15.

Competitions.	Value.	Subject.	Latest date for drawings, etc.
TRAVELLING STUDENTSHIP.			
Open to Graduates and Students, except those granted an extension of time under Article 10.	£25 and Silver Medal. Second Prize of £10, if more than 10 compete. Third Prize (President's) of £5 5*s*.	An Art Gallery in a Public Park.	May 1st.
ARCHITECTURAL SCHOLARSHIP.			
Open to Graduates and Students, except those granted an extension of time under Article 10.	£10.	Measured Drawings of some building of historic interest.	September 31st.
QUARTERLIES.			
Open to Students under 23 years of age.	£3 3*s*.	Design for Labourer's Cottage to cost £150.	January 31st.
		Essay on "Development of Renaissance architecture in England"; or "Essentials in School Planning."	April 30th.
		Architectural Sketches.	July 31st.
		Measured Drawings.	October 30th.

Reviews.

Stencils and Stencilling. By Arthur Louis Duthie. The Trade Papers Publishing Co., Ltd., 365, Birkbeck Bank Chambers, High Holborn, W C. Price 3*s*.

Now that the Art Movement craze of some years back has subsided, it is probable that the rage for Stencilling—which at that time was largely indulged in by art students—has also lost its popularity. For that reason this book may not have the success it otherwise might have enjoyed if published a few years earlier. On first thoughts it would appear that Stencilling could not offer much of interest that would be worth recording in a book, but Mr. Duthie thinks otherwise, and has managed to produce quite a dainty little volume of some 260 pages. The book is well illustrated, most of the designs shown being excellent.

Commercial Paints and Painting. By Arthur Seymour Jennings. Published by Constable and Co., Ltd., 10, Grange Street, Leicester Square, W.C. 6*s*. net.

The preface states that this book is intended for the Architect, Engineer or Property Owner. The Architect and the Engineer will most certainly read it with great profit to themselves, but it is to be feared that the Publishers will find the sale of the book among Property Owners a negligible quantity. The book is perhaps too long and too technical for the average Property Owner, unless he happens to be a Builder or following some such calling. From perusal it would appear that what the Property Owner really requires—if there is to be some substantial improvement in the quality of his paint and its application—is a pamphlet consisting of a series of "Don'ts," such as—Don't use cheap paint; Don't buy your paint by weight; Don't use lithophone on work exposed to the weather; Don't employ an ordinary "brush hand," and expect first class results; Don't paint outside on a wet day. Such a series of "Don'ts" might be liberally extended.

The Author has refrained from mentioning the fact, only too well known to most Architects, that the ordinary painter met with is a man woefully lacking in knowledge of the materials he uses, and sometimes even of their proper application. This brush hand—he can hardly be called a decorator—will cheerfully add ingredients of his own selection to carefully prepared and expensive paints, and it is more than likely that the after-blame falls on the wrong back. A painter generally condemns off hand any paint or enamel that involves a little extra muscular labour, and unfortunately such a man usually finds some responsive listeners.

Mr. Jennings deals thoroughly with every branch of paints and their application, and in a practical and useful manner. The size of the book is increased by illustrations of doubtful interest.

Registration a Public Necessity.

Mr. Pecksniff is not the only man who has posed as an architect upon questionable qualifications. Architecture is among the most important callings in life, and requires both natural personal ability and careful education ; yet, it is taken up by men with as little sense of obligation as if they could become competent professional men by merely wishing to be so.

Why expert architects who have gone through a long and expensive training should have been so lax in seeking that protection against pretenders which most other professions have provided is difficult to understand. But it has been so. Men who have undergone courses of instruction as taxing as that of a lawyer or doctor have remained content to suffer the injurious competition of men who merely ignorantly assume the name of architect, and whose only certificate is a brass plate.

The Victorian Institute of Architects is waking up to its responsibilities to itself, and proposes to take action in the direction of making it a matter of law that certificates of competency must be gained. This is not by way of hedging around a given profession by factitious difficulties, but it is a necessary provision to prevent that profession drifting into disrepute and to ensure the welfare of the public.

The actual collapse of a building is an extreme that does not frequently occur, but still it has happened, and with the most serious consequences. Within that extreme there is a host of minor features, all of which have an importance of their own. The lighting, ventilation, and general construction of some of our schools, for instance, have been the occasion of a good deal of unfavourable comment, and will probably be the cause of future expense which should have been unnecessary. Comfort and health are constantly endangered by the work of men who put up houses without an elementary knowledge of the ordinary requirements of hygiene.

Even such an obviously essential thing as sewerage to important public buildings in permanent occupation by large numbers of inmates is found to be neglected. Architecture is one of the very oldest of the arts, but it has developed in common with other of late years, and is much more complicated and exigent than in primitive days, when it contemplated little more than an artificial shelter. A sense of public necessity should be sufficient to impel the Government to take some such action as that which the Institute of Architects is about to propose to it.—Melbourne *Herald*.

War Risks Clauses for Building Contracts.

The Architects' and Builders' Journal of September 16th, publish the following clauses, which have been drawn up by Messrs. C. Harrison Townsend and C. H. B. Quennell, and embodied by them in a building contract with the approval of their clients' solicitors and of the contractors.

The architects concerned most kindly permit the use of the clauses by any brother professional who may find them of assistance at the present crisis.

ADDITIONAL CONDITIONS OF CONTRACT DEALING WITH PRICES OF MATERIALS OR COST OF LABOUR ARISING FROM THE STATE OF WAR NOW AFFECTING THE BRITISH ISLES.

The employers will pay to the contractors, in addition to the prices contained in the priced bills of quantities forming a part of this contract, any increase in the prices of materials or cost of labour, provided such increase shall arise solely from the state of war now affecting the British Isles, and provided such increase shall be actually incurred by the contractors in respect of materials purchased or labour employed by them after such increase shall have actually taken place, and provided such evidence by merchants' invoices, market quotations, and the like shall be produced to the architects as they shall require, and will prove to their satisfaction that such increase shall have actually taken place and shall have been incurred by the contractors ; and any such increase, together with a profit thereon of ten per cent., is to be added to the contract amount at the completion of the work.

The contractors shall before incurring any such increase give notice in writing of such increase and of the amount thereof to the architects from week to week, and shall obtain their written consent thereto, and if the amount of any such increase be such as the employers shall not in their sole discretion be willing to meet, the employers shall be at liberty by notice in writing to the contractors to suspend the works or wholly terminate the contract forthwith, and thereupon the works which shall have been theretofore executed by the contractors shall be measured up and valued according to the prices in such bills of quantities plus any such increase as shall have been theretofore incurred by the contractors and consented to by the architects as aforesaid, and a profit of ten per cent. and the total amount as certified by the architects shall be paid to the contractors as a final settlement of the amount due under the contract, and the contractors shall have no further claim against the employers. Provided always that if in consequence of such state of war the prices of materials or cost of labour shall, in the opinion of the architects, be proved by market quotations, and the like to be reduced below those appearing in the said bills of quantities, such reduction plus ten per cent. shall be set off by the architects against the contract amount or against the certified total amount referred to in the last preceding clause.

R.I.B.A. Charter Proposals.

We understand that the Chairman of the Licentiates' Provisional Committee (London), which was formed for the purpose of safeguarding the interests of Licentiates and others, addressed a letter on the above subject to the President of the Institute, to which Mr. Ernest Newton has replied that at the present time "the Institute will not be occupied with the consideration of the New Charter, nor take any steps in connection with it."

New Building Act wanted in New South Wales.

The keynote of the speeches at the Annual Dinner of the N.S.W. Institute of Architects, held on July 3rd, was the need that exists for a new Building Act for Sydney. The President (Mr. A. W. Anderson), said that members of the profession were delighted to know that it was the intention of the Premier to submit to Parliament a Bill to amend the City Building Act, and another measure to provide for the registration of architects. The hope was expressed that in the near future a Chair of Architecture would be established at the Sydney University. It was announced that offers had been made to give nearly £200 a year for five years for the upkeep of such a Chair.

After the toasts of the King and the State Governor, Mr. W. Newman, Vice-President, proposed "The Commonwealth and State Parliaments."

Mr. Cook, who was accorded an ovation, said that he was glad to know that a new Building Act would shortly be introduced. Such a measure was long overdue. The subject of town-planning was also receiving a lot of attention. Recently he had seen a number of houses on a small piece of land. There was not a decent backyard to any of them. Such a state of affairs should not be allowed to exist. Perhaps the land tax was responsible.

The Lord Mayor, in responding to the toast of his health, said that Sydney was in urgent need of a new Building Act.

The toast of "The Institute of Architects" was proposed by Sir Gerald Strickland. His Excellency said that an architect had to be a lawyer. He had to see that a building did not go an eighth of an inch beyond the regular line-height. He also had to make certain that the City Council's by-laws were more or less observed.

Mr. Anderson, in responding, said that if a full Chair of Architecture could not be established at the University, there should at least be a very much extended course of lectures in that subject.—*The Sydney Herald.*

British Standard Specification for Salt-glazed Ware Pipes.

Some three years ago, at the invitation of the Engineering Standard Committee, the Council of The Society of Architects appointed Mr. B. T. Tucker to represent them on the Sectional Committee on Vitrified Ware Pipes, entrusted with the drafting of the above-mentioned specification. That Committee completed its work last June, and its report has since been approved and issued by the Main Committee.

The Council recommend the adoption of the specification, copies of which price five shillings each may be obtained from any bookseller, or at the Offices of the Committee, 28, Victoria Street, Westminster, S.W.

First Atelier of Architecture.

Opening of the New Session.

Several Members of the Atelier have enlisted, but those unable to do so are carrying on the work as usual, and the first esquisse of the Autumn Session was held on September 5th. An exhibition of work done during the Summer Term and of Holiday Sketches and Figure Drawings will be held on October 7th, when the Atelier Medal awarded for work done during the past year will be presented by the Chairman, Lord Saye and Sele, to Mr. L. H. Bucknell. The Sous Patron, Mr. Chaures, being now with the armies of France, two of the senior working members, Mr. Adrian Berrington and Mr. L. H. Bucknell, have undertaken to help the members, and to do all they can to compensate for Mr. Chaures temporary absence. The Patron and the members of the Jury will also visit more often as appears desirable. A revised subscription for working members has been adopted, which should prove more economical and convenient, and lead to an increase of membership.

Mr. Thomas Wallis, m.s.a., a Member of the Council of the Society, has been co-opted a Member of the Beaux Arts Committee, in the place of the late Mr. George E. Bond.

Life Class.

A life class is now held at the Atelier every Wednesday evening previous to the usual weekly criticism by the Patron. The first meeting took place on Wednesday, September 23rd. There is a fee of 6*d*. per evening, and members wishing to join the class are requested to notify the Secretary.

London Practice Wanted.

The Secretary has an enquiry from a Member who wishes to know of an Architect's practice in London, which is for disposal. He will be glad to hear of any such.

The Society's Code of Ethics.

Action by the Council.

The Council have considered and dealt with three cases of alleged infringement by members, of the Society's code of professional ethics. In one instance it was alleged that a member had tendered for professional work on a basis of fees, and it was ascertained that two members took part in an architectural competition (Barnsley Town Hall), which had been banned by the Society. The Council after due enquiries found that in each instance a breach of the Society's code of ethics had been committed, and the resignations of the members concerned was demanded, and has been received.

An Architect Airman at the Front.

A friend of Lieutenant C. Norman Crosby Spratt, the British Army Airman whose gallant deeds at the front were recorded the other day, tells me that this splendid Officer is a native of South Africa, born in Pietermaritzburg, Natal. For many years he was a civil engineer in the Public Works Department of the South African Government, and it was the daring achievement of Bleriot, in the earlier days of flying, that first aroused his enthusiasm for the air.

He gave up his excellent prospects in Africa to come to England to study airmanship, to which craft he gave the whole of his patient attention. Before the war he was principal testing Officer at the Farnborough Government Aeroplane Works, where he used cheerfully to risk his neck in trying new devices. "I know every Natalian will shout, when they hear the news, as I did, 'Bravo, Norman, we are proud of you!'" said my informant.—*Daily Mirror.*

We are informed on what appears to be reliable authority that this gentleman is the same Mr. Norman C. Spratt, who joined the Society as a Student in 1909, and who was elected a Member in 1910, on qualifying by examination. He was articled to Messrs. Stott & Kirkby, of Maritzburg, and remained with them for some years. Afterwards he was in the P.W.D. at Pretoria, and later at Ladysmith, Natal.

The Year Book.

Changes of addresses and other revisions should be sent to the Secretary at once, for the new issue of the Members' Register, now in the press.

Index and Binding Cases.

The Index to Volume VII. is included in this issue. Binding Cases can be obtained from the Secretary at a cost of Three Shillings.

Advertisements in the Journal.

Members are reminded that they can considerably enhance the value of the *Journal* as a source of revenue to the Society, by mentioning the publication in communicating with the firms whose advertisement appears therein. By doing so the members make the *Journal* known as a useful medium between the producer and the consumer.

Special General Meeting.

A Special General Meeting of The Society of Architects will be held at 28, Bedford Square, on Thursday, October 22nd, 1914, at 7.30 p.m.

Agenda :—

1. Minutes.
2. Scrutineers' Report on the Ballot for Officers and Council, 1914-15.
3. Nominations and Announcements.
4. Lantern Lecture on "Some Belgian Towns Affected by the War."
By Mr. G. A. T. MIDDLETON, A.R.I.B.A., *Past V.P.S.A.*

The Membership.

Elected.—S. V. BRADFORD, Eastbourne ; E. KIRBY, Nottingham ; J. P. LOVELL, Derby ; G. FLETCHER, Ammanford, *Students.*

Resigned.—H. E. MATTHEWS, Derby ; P. A. HINCHLIFFE, Barnsley ; A. H. FITZGERALD, Tynemouth, *Members.* D. COOPER, Rugby ; D. HUTCHINSON, Fermoy ; A. E. MAYHEW, London ; H. A. SMITH, Bedford ; P. JONES WILLIAMS, Shipley, *Students.*

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1914

THE

Journal

OF

The Society of Architects

FOUNDED 1884; INCORPORATED 1893.

Including Transactions and Architectural Notes.

OCTOBER, 1914.

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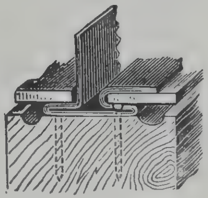

THE ARCHITECTS' WAR COMMITTEE.

Contributions to be sent through the Society should be addressed to the Hon. Secretary, Benevolent Sub-Committee, 28, Bedford Square, W.C.

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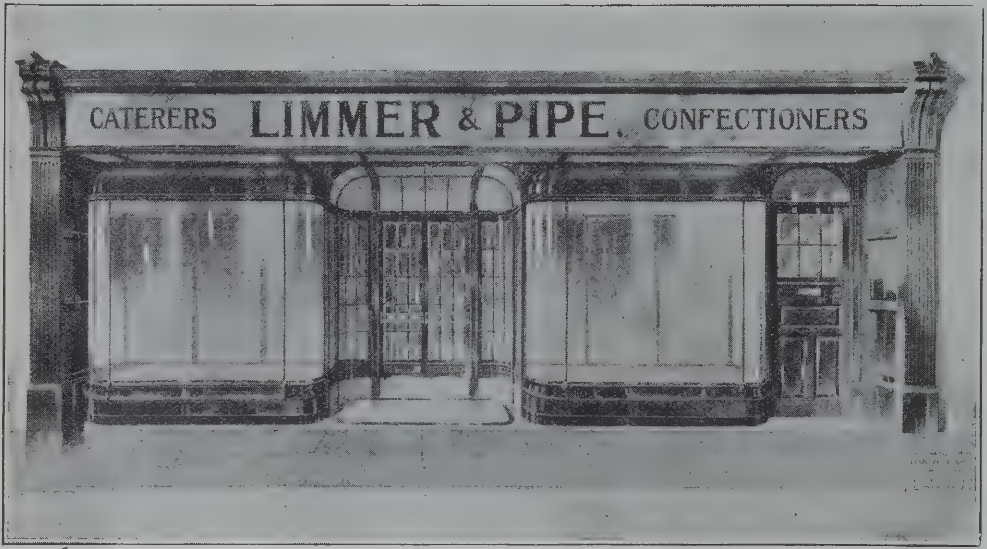

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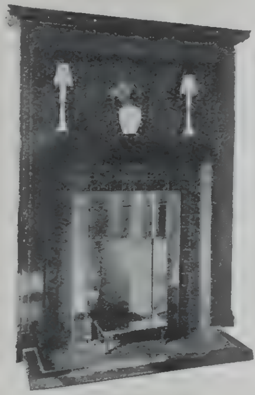

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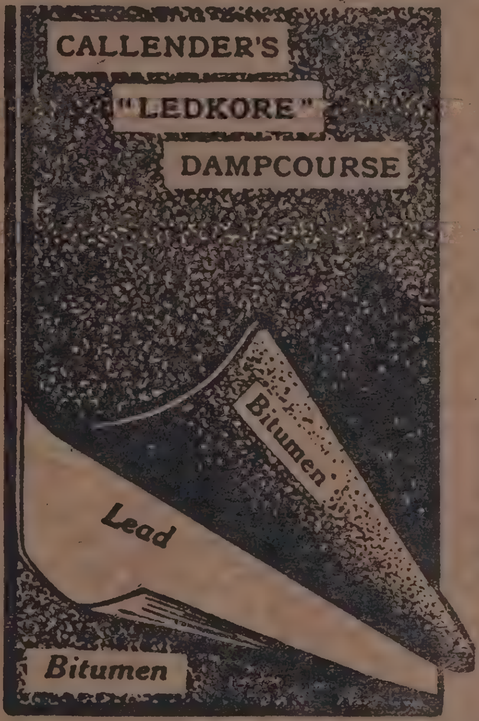

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